Clinical Lecture
ON
FRACTURES OF THE UPPER EXTREMITY.

Delivered in University College Hospital,

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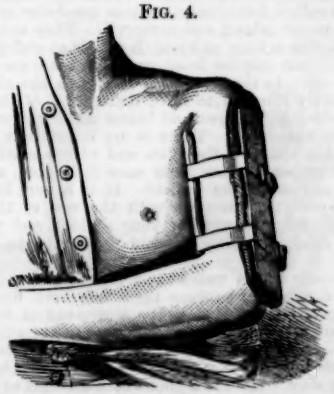
(*Concluded from page 68.*)

WE now come to the upper end of the ulna, and the fracture which is known as fracture of the olecranon. There is a man here who has a fracture of the olecranon, and you will notice that his elbow has been kept at right angles by my direction. Supposing you have a fracture right through the olecranon into the joint, which is the common form, you have then, of course, fibrous union afterwards, and the theory is that if you put the arm out straight you will get a shorter fibrous union and a better result. I do not believe it. You will find that if you let the patient bend his elbow there will be a little separation no doubt, but not much; and the comfort of having the arm bent far outweighs the other matter altogether. I have seen the most disastrous results from keeping the limb straight. Some two years ago a handsome, well-built young officer came into my room, and asked me to look at his arm. It was perfectly straight and withered. He had no sensation whatever in his fingers, and his elbow and wrist were perfectly rigid. I said, "What has happened?" He replied, "I had an accident from polo in India; it was a simple fracture, and it was treated by the doctor there." It had been put up straight, and it was so badly put up that inflammation ensued, sloughing took place of the whole front of the arm, and destruction of the median and ulnar nerves. This young fellow, twenty-five or twenty-six years of age, was completely disabled for life by this unfortunate treatment of his arm. There was not much to be said; but it was quite clear that nothing could be done except amputation, which I advised, but he declined. An elbow joint which has a fractured olecranon is certainly liable to inflammation; there is always effusion in it. (You will remember that in the man's elbow which I showed you, although the fracture was ten days old, there was still considerable effusion.) I am sure that to put an arm in such a position that it may become useless to the patient is quite unjustifiable. What you ought to do is to put it at right angles—in fact, to put the arm in a sling. It is said that you may have a fractured coronoid process. No doubt such a thing might happen, but it is very rare except in cases of smash of the elbow. It does happen occasionally with dislocation of the forearm backwards, but under these circumstances you may disregard it. A fractured coronoid process never unites, so far as we know, with the ulna; therefore there is not much object in treating it; you would only treat the general swelling, and very likely would not know that the coronoid was broken off until afterwards, when the swelling had gone down.

Now we come to the humerus, in which we have fractures of the upper extremity, of the shaft, and of the lower extremity. Fractures of the shalt are comparatively simple matters, but fractures of the upper and lower extremities are usually very complicated accidents, and I suppose there is no class of case which gives more anxiety to the surgeon than a complicated fracture of the elbow joint, or about the shoulder joint. We have, as you know, in the hospital a very fine young fellow whose elbow I excised the other day. That is a good example of a complicated accident at the lower end of the humerus. A year ago he received an injury in a football match. It was not clear what the accident was at that time, but I have no doubt, from what we saw afterwards, that it must have been dislocation backwards of the ulna, with fracture of the lower extremity of the humerus. You remember that he came here soon after Christmas with a very stiff arm, which I tried to get into use for him by forcible bending. He came again in the summer, when he was not at all better, and I then advised him to have the elbow excised. The great point in a fracture low down no doubt is, in the first place, if possible, to make an accurate diagnosis (which is not always possible), and at all events to treat the case in such a way that no harm may result. I say that particularly, because I am sure that sometimes harm does result from treatment. I believe in all cases of fracture of the lower end of the humerus the arm should be well bent. I include, of course, cases of separation of the lower epiphysis, and I may remind you that the lower epiphysis of the humerus includes all the articular surface, and does not unite with the shaft till about eighteen years of age. I like to bring the forearm thoroughly up so as to put the hand to the opposite shoulder, and then I feel confident that the fragments will fall into the best position. If there should be any stiffness, as there is likely to be, still I believe on the whole it is the best position for the patient. Children will fall down and hurt their elbows, and you may be not at all clear what the nature of the case is. You ought first to make out whether there is a dislocation, because let me remind you that dislocation of the elbow is common in children. The elbow is such a shallow joint in a child that the ulna easily slips backwards off the humerus. But supposing that it is not dislocation, and that it is fracture, then, without making too minute a diagnosis, I would treat all such cases with the arm well bent in the way I have shown you. The great advantage is that if the parts unite a little wrongly you can pull the arm down and restore movement; but it is not so easy to bend the arm up, you are liable to break the bones. Supposing you have a separation of the

FIG. 4.



epiphysis, the treatment will still be the same; but I think it right to warn you that the callus thrown out will be excessive, and will very much limit the range of motion. I mention this because you should always hold out to the patient's friends that things will improve in time. The callus, which is superfluous at first, becomes absorbed, and then there is a fair amount of movement in the joint. But, if you are wise, in all cases of injury about the elbow joint you should not give a too hopeful prognosis at first.

The shaft of the humerus of course you can easily enough treat by straight splints—two or three straight splints down the sides; but I do not advise you to trust to straight splints alone, because we know that the humerus is the bone of all others which is liable to non-union or false joint. What is the reason of this? It is because of the difficulty of fixing either the elbow or the shoulder. I believe it is impossible to fix the shoulder-joint. You may try any apparatus you like, still the patient will wriggle the shoulder about. It is, however, clearly possible to fix the elbow, and therefore you ought in all cases of fracture beyond the middle of the shaft of the humerus to combine treatment by a rectangular splint with one or more straight splints. (Fig. 4.) You bind the three together, and the great advantage is that the elbow is absolutely fixed. If you do that, I believe you will never have to regret imperfect union. Then coming to the upper end of the humerus, let me remind you of the fine man we had here too or three weeks ago. He came here to show me his arm and to know if anything could be done for it, simply because it was shorter than the other. He had evidently had an accident which had been treated—I do not say badly

treated,—and the result was that the humerus was about three inches shorter than on the other side, which of course somewhat disabled him. The explanation of the deformity in fracture of the upper end of the shaft is that there is a tilting of the upper fragment by the supra-spinatus, and a drawing up of the lower fragment into the axilla, partly by the pectoral and deltoid and partly by the triceps. If you leave the fragments in that position they can hardly unite, or if they do you will have a considerable shortening if you do not bring the fragments down into their places. It was because that difficulty had not been overcome in the patient I refer to that he had such a shortened arm. I recommend you to use a splint with a crutch, which you can get made or manufacture for yourselves, if you take a piece of padding and fold it over the top of the splint, and get the arm fixed upon it. You can also put a shield, made of gutta-percha or leather, over the side of the shoulder and bring it down the arm. That is no doubt an extremely good plan, but I can tell you a better, which is to use the ribs and the side of the chest as a splint, and not to have any other splint inside the arm at all. You can put the folded pad up into the armpit, and then put a good padding inside the arm and bring it to the side. I believe that, after all, is the best plan, but you can still, if you like, put a shield or cover to the shoulder. I like to have it open, so that I can see the condition of the parts, but I do not object to the cap.

With regard to the shoulder, let me remind you that we have occasionally a non-union of the acromial epiphysis, of which I have here a specimen in a bottle. That is a little point to bear in mind, because no doubt many of the cases of so-called fractured acromion are loose epiphyses which have never united, and never will. They are treated as fractures, which does no harm, but it is as well to know that the epiphysis may be loose, and that there may be no fracture at all. In the case of a fall upon the shoulder, the most likely thing is to have dislocation of the outer end of the clavicle, and you had better make up your mind to leave that unreduced. There is no instrument or contrivance which will keep the outer end of the clavicle and acromion in proper relation when once dislocated, and you had better say so to the patient. It is a very little deformity, it does not interfere with the use of the arm, and you will only be putting your patient and yourself to a great deal of useless trouble if you try to keep it in place.

Then we come to the well-known *crux*, the treatment of a fractured clavicle. I suppose there has been more misspent ingenuity with regard to the treatment of fractured clavicle than there has been with regard to any other bone in the body. I think that, on the whole, the method we adopt in this hospital—viz., Sayre's—is the best; but it is not the only way. Here is a plan which answers extremely well—I mean by Ellis's apparatus. It is rather cumbersome and a little expensive, and we therefore cannot use it in the hospital. It consists essentially in a good thick pad, which keeps the arm away from the side at the upper part and throws outwards the shoulder to a certain extent. We have then the upper arm kept to the side below the pad by a broad strap, which encircles the body, and the forearm can be put into a common sling. It is not a bad method; but I think you can get the same results in the great majority of cases simply by padding the axilla and binding the arm firmly to the side. Sayre's is perhaps the best method; but it is a curious fact that few people know how to put Sayre's bandage on. You want a strip of good plaster, which you loop round the arm and secure with a pin; it goes round the upper part of the humerus, and then passes across the back and right round the body (Fig. 5), and is again pinned so that it is held firmly. Now what have we done? We have drawn the upper part of the humerus backwards, and that is the point that Sayre so much insists upon; we bring it back in this way, and make it the fulcrum. For, if we now bring the elbow a little forward, you will see that the humerus pushes the shoulder—that is, the outer end of the clavicle—backwards and outwards, which is exactly what is wanted. Having thus fixed the arm, we hold it by another strip of plaster, which has a hole for the elbow cut in it (Fig. 6). Then it is wise to put a third strip round everything, to hold all firmly together. I think this is a very good method. It is a modification of Velpeau's old method, which had the great disadvantage that it simply consisted in bringing the elbow up without any fulcrum through which to act upon the shoulder. That is the mistake usually made in putting on Sayre's apparatus—that the upper part of the humerus is not drawn back sufficiently before bringing the elbow forwards. Unless you do that, you do not fulfil all the indications of the apparatus.

Lastly with regard to the scapula. Fracture of the scapula is an exceedingly uncommon event, and it requires very little treatment. It usually occurs from a crush of the patient. We have an example of the accident here in which the scapula has been broken across. I need hardly say that, being covered by muscles in front and at the back, there can be very little displacement, and if there were you could not overcome it. You may as well, therefore, let it alone, putting on a broad bandage as for fractured ribs. The result will be quite satisfactory.

Then a word as to the length of time that you should keep up fractures, and what you should do with them afterwards. It is not sufficient simply to get fractures united: you must get the patient's limb into a good state. It is a mistake to lose sight of the patient and only to tell him to go about using his arm until it has got all right. Perhaps it does not get all right, and after six weeks or three months the man goes to the nearest bone-setter, who does what you ought to have done, moves the joint, and he gets all the credit, and the story goes about that you have made a mess of the case and overlooked a dislocation! If you want to take care of your own reputation, do not dismiss a case of fracture until the patient has complete use of his limb. The fracture may be united, but if the joints are stiff the patient cannot be considered well; you must

FIG. 5.

FIG. 6.

restore movement to the joint by moving it, and if necessary putting the patient under chloroform for the purpose. If you attend to what I have said with regard to the treatment of these several fractures, you will not have so many stiff joints as some surgeons have. The fact is that cases are treated a little injudiciously by splints, and the splints are kept on too long. For ordinary fractures of the upper extremity three weeks or a month is ample time for the splints. You should take off the splint at the end of that time, and let the patient have a sling. When he has had the sling on a fortnight or so, let him begin carefully to use his arm, and probably he will get a much better arm than if you kept the splint on longer. Of course each case must be taken on its own merits. A young healthy patient requires less time than an older and feeble patient. It may be necessary to keep a splint on the upper arm, for instance, over a month; but if you do keep it on, you might take the splint off at the end of three weeks and gently move the joint (it is a great mistake not to do that), and then put it back again on the splint, if you do not think it is safe to leave it off.

One word before I close with regard to the difficulty you will all find in treating cases of fracture. Knowing what that difficulty is, I would beg you to be charitable to other people. Do not think that because there has been a bad result it must necessarily be the fault of the surgeon, because it is not so. You will find that with the best advice and the most skilful treatment fractures will sometimes do badly. There must be obscurity in the diagnosis in many cases, and difficulty in carrying out treatment in

others. Therefore, although you should make every effort to make a good diagnosis and apply the best treatment you can, you must be prepared for disappointment. And if you come across cases which have been treated by others, be a little charitable about the treatment they have adopted.

Lecture

ON A

METHOD OF GRAPHIC RECORD

OF THE

PHYSICAL SIGNS IN THE INVESTIGATION OF DISEASES OF THE HEART.

Delivered at the Post-graduate School, New York, on Oct. 5th, 1888,

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GENTLEMEN,—Your esteemed Professor, Dr. Andrew H. Smith, having invited me to give an address on a subject connected with clinical medicine, I have determined to request your attention for a short time while I describe the method which I adopt in investigating Diseases of the Heart. You will agree with me that in clinical observations it should be our aim to attain precision in the highest degree possible. There should be precision of observation and precision of record, but you will admit that it is desirable that such precision shall be obtained with the expenditure of as little of precious time as possible, and that the record presented shall be such as can be readily perceived and rapidly comprehended. These desiderata we will do our best to obtain.

We will suppose our patient prepared for examination. Of course everything should be so done as to allay any perturbation on the part of the subject of our observations, but the dress must be removed in so far that the chest is completely uncovered; a warm wrap can be easily adapted so that the back and shoulders and the parts not under our inspection at the moment are protected from cold. The position of the patient may be standing, sitting, or lying in bed, with the back well supported. It is fundamentally necessary that the posture be such that both sides of the thorax are presented in like condition. It is an observation of very ancient origin that the impressions conveyed to the ear are more fleeting than those recorded by that more faithful witness, the eye. I consider it, therefore, of great importance that you should be provided with a pencil, capable of making sufficiently visible marks upon the surface of the skin. An ordinary aniline copying-ink pencil answers the purpose, but the dermatographic pencil made by Johann Faber is much to be preferred. Your patient should be requested not to object to your judicious use of the picturesque method, for a little soap and water subsequently will remove all the traces. If a sensitive person do so object, you may use as your recording instrumment a very fine camel's-hair pencil dipped in bland, colourless oil. The *rationale* of this proceeding I will hereafter explain.

You will commence by a careful *inspection* of the thoracic surface, and especially the præcordium. If the apex-beat be visible, indicate this by dots of the pencil over the area in which it is observed; if there be visible pulsations in the epigastrium, in the regions of the aorta or pulmonary artery, or the neck, record these by the sign "Pn."; if venous pulsation, use "V.pn."; if with the pulsation there be retraction of the thoracic wall, use the sign "S.retrn."; a notable bulging of any portion of the surface can be outlined by dots.

We now come to *palpation*. The tips of the fingers applied over the region of the apex will determine the question whether the systole of the ventricles is to be felt or not, or whether this is short and sudden or protracted and heaving. Furthermore, in some cases an important indication may be obtained as to the form of the apex; to this end an application of one finger is better. If the finger be actually lifted, it is of course a fair inference that the ventricle is actually subjacent, though the shock of the systole may communicate a vibration visible beyond this area; at the parts where the finger is thus lifted, an outline corresponding to the apex may be indicated by short broken lines, thus distinguishing from the points or dots used to record the area of visible impulse; in like manner other pulsations as detected by palpation may be recorded by such interrupted lines in other parts of the thorax or neck. If a thrill be felt, this should be indicated in its position by a serrated line; the position it occupies in the cardiac rhythm can generally be readily determined by palpation. The presystolic thrill can be felt to be terminated by the ventricular systole; it comes to an end abruptly, as the systolic and diastolic thrills never do; this can be expressed by a vertical line at the termination of the horizontal serration, the length of the latter having a relation to the duration of the thrill.

We now come to the important evidence afforded by *percussion*. It is needless here to describe the practice of percussion when this is effected in the usual manner, the stroke being made on a finger or fingers of the left hand applied to the surface of the chest. No doubt valuable information is gained with the finger or fingers thus used as a pleximeter, and a finger or fingers of the right hand as a plessor. I have been long convinced, however, that this method is wanting in precision. It is true we can get evidence of an exaggerated or restricted area of præcordial dulness, and sometimes a bulging of the great vessels, if such exist; but we do not get an accurate outline of the heart and great vessels, such as, I am sure, it is possible to obtain. For this purpose we must use another kind of pleximeter. The form which I have introduced, and that which I always employ, consists of a single piece of vulcanite of the shape shown in the figure. A thin, flat, oblong plate, an inch and a half by half an inch, has on its upper surface

FIG. 1.

Vulcanite Pleximeter.

FIG. 2.

Mode of holding the Pleximeter.

a slender vertical column an inch and a half in height, which is surmounted by a smaller plate, three-fourths by three-eighths of an inch, set parallel to the former plate (Fig. 1). The little instrument is held by the fore and middle fingers of the left hand applied on each side of the vertical column, the sensitive tips of the fingers resting on the upper surface of the larger horizontal plate (Fig. 2). The lower surface of this latter is applied to the wall of the chest, and percussion by one or two fingers of the right hand by an even and not too forcible stroke from the wrist is made upon the upper plate. It is obvious that the whole of the pleximeter vibrates with the stroke.

Now it is quite unnecessary, in the description of the use of this little instrument, to enter upon the refinements of acoustics; in fact, I advise you not to think in terms of *sounds*, but rather in terms of *vibrations*. You appreciate these vibrations by the ear and by the tactile sense. My little pleximeter is so constructed that vibrations are communicated directly to the organs best fitted to estimate them—the tips of the fingers. Fix your mind on *vibrations*, whether these be sonorous and you hear them, or mechanical and you feel them, are points of but secondary importance. You commence by applying the pleximeter, with its long diameter, parallel to the sternum, about midway between the axilla and the right sternal border, and eliciting vibrations in this situation. This proceeding in normal conditions gives you the ordinary thoracic vibrations. You then gradually approach the pleximeter nearer the sternum, until you arrive at a line where the vibrations are sensibly modified. By slightly inclining the pleximeter so that the vibrations come from its left edge, this is practically a line—that is, a surface without notable breadth. Here you draw a line with your pencil. By repeating the process at higher and lower levels, and uniting the marks, you thus delimit the right of the area of modified vibrations.

In like manner, percussing from above downwards, with the long diameter of your pleximeter horizontal instead of vertical, you arrive at the upper limit of the liver, as indicated by the area of modified vibrations.

It is generally thought that the percussion evidence, as regards the area occupied by the heart and vessels, does not extend above the third rib; but you will readily convince yourselves that, by adopting the method I have described, you can obtain a line sloping to the left reaching above the second rib, where it fades into indefiniteness. In percussing the left side of the chest, you begin at the level of the second rib, two or three inches to the left of the sternal border, and approach to the right until you arrive at a line of modified vibrations which will be parallel to that obtained on the right side. On taking a slightly lower level, you will find that the line must be rather sloping towards the left; this inclination to the left side is proportionate to the area occupied by the auricles and the left ventricle. The outline of the apex of the heart is readily mapped out. In cases where the stomach is distended with flatus, only very light percussion is necessary. If you wish to narrow your area of percussion at this point to delimit the apex, you can reverse the pleximeter, percussing on the larger, and applying to the chest the smaller, plate. Over the lower border of the heart there may be some difficulty. In some cases the differentiation from the liver is not possible, and this is seldom important. In many cases, however, the vibrations over the liver and those over the right ventricle are so different that the demarcation is easy. In this way you obtain, as I believe, an actually correct outline of the heart and the vessels as they spring from it; that is to say, the upper limit of this dulness is formed by the right auricle, the pulmonary artery, and the aorta. Any bulging of this upper portion is for the most part caused by the aorta. A projection of this may be distinguished when there are no other signs denoting aneurysmal dilatation. Again, a general fusiform dilatation of the aorta can thus be demonstrated. This is found in many cases of gouty affection, of chronic renal disease, and sometimes in syphilis, when no other signs indicate enlargement of the vessel.

Of course, it may be asked how the process that I have just described can be submitted to actual proof. In the first instance, it can be shown that percussion successively performed in this manner gives rise to figures which are absolutely identical; and, in the second place, allowing for some post-mortem changes, it has been shown in many cases at the examination after death that the outline is mathematically correct. In some forms of dilatation of the aorta, whether saccular or general (fusiform), post-mortem evidence has shown the accuracy of the diagnosis when there have been no other physical signs. It is needless to say how important this is to demonstrate the dilatation of the heart, whether as regards its right or its left cavities. The more or less pointed form of the apex indicates hypertrophy, while the rounded outline indicates dilatation. Again, it is of great importance often when the percussions show a very restricted outline of the heart; this is very marked in some wasting disorders, especially cancer (notably cancer of the œsophagus or stomach) and pulmonary consumption. In fact, I believe it to be a sign of the highest importance in the prognosis of consumption, for if there be evidence of local mischief in one apex or in the apices of the lungs, and the outline of the heart be normal or considerable, the hope of arrest of the tubercular changes is very much greater than when the outline of the heart is small. When such outline is found to be *very small*, and therefore there are indications of a wasted heart, the prognosis may be said to be extremely grave, and the downfall will probably be rapid. Of course, this sign is of still greater importance when it is observed from time to time that the area occupied by the heart becomes on successive examinations smaller. In certain cases the outline on the right side may extend far beyond the sternum and indicate great dilatation of the right cavities; if this coexist with an enlargement of the left area, to or beyond the nipple line, the lesion is usually mitral regurgitation, although aortic disease may coexist; but if whilst the right side shows dilatation the left border is within the nipple line, and the apex not lower than the normal, it is probable that there is mitral stenosis. In some cases of mitral stenosis I have observed a distinct bulging in the situation of the left auricle. In some cases, also, where there are signs of dilatation of the right cavities, I have observed a wedge-shaped area at the lowest part over the right auricle and to the right, which I can only explain as indicating a distended inferior vena cava emptying into the auricle. Having now obtained a general outline of the heart, we proceed to again percuss over the surface thus delimited, in order to ascertain if there are modified vibrations over particular portions therein. If, in percussing the outline in the way I have just described, the transition from the thoracic vibrations to the modified vibrations over the heart area be very abrupt—that is to say, that very little vibration is elicited at the point where the lines are drawn—it is very probable that there is pericarditis with effusion, or else thickened pericardium; and again, in percussing from above downwards, if fluid occupy the pericardial sac, no differences are to be elicited over the area delimited, absence of vibrations over the whole is very marked. On the other hand, under ordinary conditions, when the pericardium is unaffected on percussing over the delimited area from above downwards, a line will be reached where the vibrations become very different. This line is found practically to commence a little above the ensiform cartilage, and to incline upwards to the left border of the cardiac dulness at the level of the fourth rib or the third interspace. Above this line vibrations are more marked than below; the line indicates a greater density, and, I take it, points out the commencement of the thick wall of the ventricles, the outlined area above it being occupied by the right auricle and the great vessels. In some cases, where there is considerable dilatation of the heart, I am inclined to believe that it may be possible to detect by percussion indurations or calcareous changes in the auriculo-ventricular valves. I know that by this statement I may subject myself to the observation, "Fortis imaginatio generat casus"; and I admit that further observations are needed; but in some cases the post-mortem signs have very decidedly confirmed the evidence as to the site and extent of thickening obtained during life.

We now come to record the signs obtained by *auscultation*. I need scarcely allude to the question of stethoscopes; for localisation it is sometimes better to use the binaural stethoscope, but it is well to accustom oneself to the employment of the ordinary wooden or metallic stethoscope as well. Any accentuation of either of the normal sounds can be expressed by the sign + within the area in which such accentuation is noted. Supposing such accentuation be noticed in the aortic area, you will remember that the most common cause is chronic renal disease, in which condition there is hypertrophy of the left ventricle, with high tension in the arterial system. In cases such as these it is frequent that dilatations of the aorta can be delimited by percussion, as I have just described, when other signs of dilated aorta are not manifest. Supposing the accentuation of the second sound occurs on the left side in the area of the pulmonary artery, you will remember that such usually exists with mitral disease, obstructive or regurgitant; this loudness of the pulmonic second sound cannot be interpreted as an adverse sign, because one can infer from it an adequate systole of the right ventricle; but it is a very important point if, after having observed this accentuation, you on subsequent examinations find the second sound to diminish in intensity; this generally means that the right side is dilated, that there is tricuspid regurgitation, and that in this manner the tension in the pulmonary artery has been reduced. You will now proceed on the surface of the chest to record the murmur you observe. By the sign "S" we mean the systolic murmur. If this is observed at the base on the right side—that is to say, in the aortic area—indicate this by the letter "S" at the point where it is observed; and if it be carried up the vessels to the carotids or be heard in the episternal notch, indicate this by letters or by an arrow showing the direction. If the systolic murmur is heard on the left side of the sternum in the area of the pulmonic valves, you will indicate this by the sign "S" in this position. In many cases it is advisable to map out the area of audibility by short broken lines. Supposing a diastolic murmur is heard, this is to be indicated by the letter "D," and the point at which its maximum is observed by a larger letter; its direction, also, whether down the left of the sternum or towards the apex of the heart, can be indicated by an arrow. A systolic murmur in the tricuspid region is indicated by the sign "S," the size of the letter indicating the maximum; and in the mitral area—that is to say, the apex—the sign "S" is to be used if the murmur is systolic. The sign "PrS" is to be used at the point where you hear

the presystolic murmur, and broken lines should be used to indicate the area on which it is observed.

You have thus made upon the surface of the chest of the patient the map or graphic record of the signs observed. It now only remains to copy such record for reference. For this purpose, you take a very small camel's-hair brush dipped in bland colourless oil and trace over the outline you have delineated, marking in all the letters and signs I have just described. The oil used may be olive oil or sweet almond oil. You now simply apply over the surface with gentle pressure a piece of tissue paper, on which the marks made by the oil will be readily imprinted. Placing this on a smooth surface, you go over the outline again with a pencil, and you thus obtain a permanent record of all the signs observed. It is scarcely necessary to say that from this you can, if it be desirable, obtain an exact measurement in centimetres or fractions of inches of the heart area, and you see at a glance the positions of audibility and the lines of conduction of murmurs, and, indeed, of all the physical signs necessary to be recorded. On subsequent examinations, you can obtain outlines which you can compare with the former, and you have the advantage of at once grasping the situation in a much more decided as well as more rapid manner than if you had to take your inferences from verbal description, however accurate they might be. Copies may be multiplied either by placing a sheet of sufficient transparent paper over the surface of the original and tracing thereon, or by interposing carbon paper between the original and a paper of whatever thickness may be desired, and making the tracing with a hard point or style. By the latter plan, the tracing may be copied into the case-books.

I hope it will be obvious that this method, though its exposition may be too long and tedious, really requires appreciably no more time for its execution than any other careful clinical exploration of the heart. It puts in force the well-worn aphorism, "When found, make a note on," and permits the results of your observations to be made in one or two minutes a permanent record.

CLINICAL NOTES ON DIPHTHERIA.

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(Concluded from page 71.)

ALTHOUGH the series of cases reported are but few in number, they enforce certain definite facts in the clinical history of diphtheria. They teach us that the character of the membranous exudation is not of prime value with regard to diagnosis or prognosis, the mere quantity of membrane being no criterion of the intensity of the attack or liability of the patient to laryngeal implication. It has been long known that in the neighbourhood of an outbreak of diphtheria numerous cases of sore throat are found presenting appearances more or less of diphtheritic nature. If such cases be classified, they will be found occupying a curve, at the bottom of which may be placed simple relaxed throat, and at the top the true membranous variety. We may see the same phenomena in an outbreak occurring in a single house: Cases 1 and 2 enforce this truth.

We are so accustomed to look upon diphtheria as distinguished by membranous exudation on the throat that there is danger of our overlooking the other less marked results of the same disease. In other words, may we not sometimes find the disease expressed without its local throat manifestation? I attach much importance to the history of the cases 1 and 2 referred to in this paper. In these outbreaks the extreme glandular enlargement was so decided, so marked, that, as I have stated, if seen alone, without knowledge of the evident cause, mumps would have been looked upon as the causative agent. Seeing these cases of enlarged glands without a trace of throat trouble, one could not refrain from asking the question, May not diphtheria occasionally express itself as affecting glands alone? Some few months past a case occurred to me which appeared to have an important bearing on this question. I was asked to see a child aged nine, who had been poorly for two or three days. I found the child with the left parotid and the glands at the angle of the jaw much swollen and painful; pulse 120; temperature 102°; no trace of throat mischief. The child had had a well-marked attack of mumps the previous year. The tongue was coated, and there was much cardiac debility; in fact, the little girl, the morning I first saw her, had a severe attack of syncope while I was present. The child continued in much the same state for five days, on the whole getting better. There was no evidence of bowel trouble or symptom that the illness was enteric. The house had been newly built, and had been drained under the supervision of one of our best engineers. But I could not help feeling suspicious that sewer gas was the cause of the illness. The child was removed to another house; the following day there was decided improvement, and a rapid recovery took place. I obtained the services of my friend Mr. Shirley Murphy. He examined the drainage, and reported that a grease trap in communication with the main drain had not been attended to; it had overflowed and was blocking the drain, sewer gas being forced into the house.

About the same time I was asked to see some children convalescing from an attack of varicella, the convalescence being impeded by swollen glands of the neck, with slight pyrexia. There was no apparent cause to account for the swollen glands; no throat trouble could be seen. The children were sent to the seaside and rapidly recovered. Mr. Shirley Murphy examined the house, and reported that there was decided leakage of sewer gas. I have no doubt it was the presence of this poisonous gas which gave rise to an unusual complication in the course of varicella. It must not be forgotten that the glandular enlargement is not in direct ratio to the amount of membranous exudation in any one individual case of diphtheria.

The relation of tonsillitis to diphtheria is often a matter of discussion, and here again we may gain help from a study of the cases I have reported, tonsillitis of a follicular character being found in several instances in which the cause was undoubtedly diphtheria. A few months ago one of the nurses at the West London Hospital had a mild attack of so-called follicular tonsillitis. The throat mischief speedily improved; there was no coalescing of spots, but a few days later symptoms of paralysis supervened, and declared the initial attack to have been diphtheria. There can be no doubt that a benign-looking tonsillitis may be symptomatic of diphtheria. On the other hand, a most severe attack of the same disease may be absolutely without such specific taint. A gentleman aged thirty-eight was seen by me. He had walked home after dining, and had been caught in the rain, getting drenched. Instead of changing his clothes he sat by his study fire reading. The following day he shivered and had a headache. In the evening his throat was sore. He passed a sleepless, disturbed night, and when seen by me in the morning was found to have a creamy membranous deposit on the posterior part of the tonsil. The membrane was limited to the tonsils and did not spread, and there was nothing in the further progress of the case to warrant the opinion that the attack had been more than catarrhal. But the exudation was distinctly membranous. It is a help in the early diagnosis of such cases to know that catarrhal tonsillitis never leaves the tonsils, whereas a tonsillitis of specific origin in numerous instances affects the uvula or soft palate.

It is experience common to all that sore-throats differing in appearance may arise from impure air. It, moreover, appears as if a throat suffering from catarrh were directly influenced by the atmosphere in which the patient might be; in other words, a patient suffering from catarrh or inflammatory condition of the throat and living in impure air, is predisposed to a change in the character of the throat attack, a catarrhal tonsillitis becoming membranous and infectious.

On Oct. 10th, 1888, one of the head nurses at the West London Hospital was taken suddenly ill with shivering, headache, and abdominal pain. Temperature 104°. Her throat felt uncomfortable, but was not directly complained of. The right tonsil was found to be red and swollen. The following day, when seen by me, the general conditions were improved, but the local trouble gave much pain, the tonsils being now extremely swollen. At one part there was a patch of pus or altered secretion. It had not the appearance or character of membrane. The following evening there was a discharge of blood-stained pus, followed by much relief. Two days later, from the spot where the discharge had issued a thin layer of yellow membranous

exudation extended. The next day this patch had extended on to the soft palate, the tongue was dirty, and the glands painful; no albumen. I ordered her removal from the room she occupied to our isolation ward, and the following day all conditions had improved; the headache had gone, the throat looked healthier, and there had been no increase of membranous exudation.[1] The type of the disease had changed. It was almost impossible to resist the conclusion that this change was mainly owing to leaving a small close bedroom opening into one of the general wards of the hospital, and exchanging it for one well ventilated, airy, and containing a large amount of pure air. It is a pathological law that all specific contagia require a suitable soil on which to grow. In some cases it appears possible to provide this soil; thus typhus, under certain well-known conditions, would assuredly spring up. We may say the same of relapsing fever, the same of diphtheria, and though at the moment we cannot state with exact precision the factors which comprise this law, we can make a shrewd guess. In an atmosphere impregnated with animal emanations, especially if tainted with sewer gas, the specific contagium of diphtheria will undoubtedly grow with luxuriant freedom. As with typhus, our main remedy is pure air.

At the present time there is a discussion taking place with regard to the diphtheria cases of the metropolis. Hospitals, knowing well the fearful mortality, not only to the actual patient, but to his attendants, are anxious to rid themselves of the responsibility of such cases. The Local Government Board has been petitioned to permit the use of their infectious hospitals for the treatment of diphtheria. Whether such procedure will be attended with unmixed good is a matter of doubt. There is probably no disease which does better when isolated. It does badly in the general wards of hospitals; still more badly in the wretched, badly-lighted little rooms which so often do duty as isolation wards. But in such wards or rooms placed in an elevated position, with abundant ventilation and light, case after case will be found not only to recover, but to lessen the liability of infection to the attendants in charge. Are all our acute contagious diseases, one by one, to be transferred from hospitals? It is now hard enough for the student to see the most ordinary acute contagious disease. If diphtheria is taken from his clinic it will be a matter of serious moment. There is no reason why every hospital in London should not have an isolation ward constructed on true scientific principles—not at the basement, but at the top. Why not on the roof itself? A well-lighted, airy structure could be easily placed in such a position, and would contribute materially to lessening the danger of the disease.

PARALYTIC DEFORMITY OF THE FOOT.

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OF the many conditions of foot distortion, those which result from paralysis occurring during childhood afford the best means for studying the nature and treatment of talipes. It has been the custom, in considering this subject, to follow a classification founded on the conformation of the distorted foot, and to disregard the more scientific plan of a description based upon the etiology of the cases. The student is thus carried from a deformity of congenital origin to one of paralytic development; next, perhaps, to the spasmodic, rachitic, atonic, and other cases, resembling each other somewhat in external appearance, but differing widely in all other respects. Such a method must be productive of some inconvenience to the inquirer, and I hope to be able to show, by illustrating the different varieties of paralytic talipes, that in following through a series of cases all depending upon the same exciting cause, the study of deformity of the foot may be considerably simplified. The cases given have all been directly under my own observation; they have been selected from a large number of which I have kept a record, by means of photography, during the last five years, and it will be found that they pass from a condition of scarcely appreciable defect, through a gradually increasing state of displacement, up to conditions of distortion of the most severe nature.

[1] Subsequently fluids returned through the nose, the voice being nasal. There was partial paralysis of the soft palate.

Talipes Arcuatus.

Talipes arcuatus is characterised, as the name implies, by increase in the height of the arch of the foot; the condition presents no very visible indication of structural defect (see Fig. 1), but if an impression be taken of the sole the existence of abnormality will be at once detected. The sole of the left foot is much contracted, and the extent of treading surface is considerably less than that of the right foot in the same subject. This loss of treading surface is due to the presence of several small bands of contracted fascia, stretching like bow-strings across the sole of the foot, which prevent it from spreading when placed upon the ground, and cause an abnormal degree of deepening of the arch.

FIG. 1.

Arcuatus results from slight paralysis of the muscles of the leg, which is usually the sequel of scarlet fever, diphtheria, or other exhausting illness. Upon recovery from such an attack, some little awkwardness of gait may have been observed, or it may have been noticed that the shoe was worn away more quickly at the front part of the sole than elsewhere. These slight symptoms exist perhaps for a few months; they pass off, the child "grows out of" his bad habits of gait, and there apparently is an end of the matter. The transitory lameness is due to the anterior muscles of the leg being chiefly affected with loss of contractile power. During this period of existing weakness of the flexors, the front part of the foot becomes slightly depressed at the transverse tarsal joint, the cuboid and scaphoid bones falling down from the os calcis and astragalus, and carrying with them the cuneiform bones, metatarsus, and phalanges. The depression of the front of the foot of necessity causes approximation of the heel and toes, with shortening of the sole, and the plantar fascia thus becomes secondarily contracted. When the paralysis passes off, the front of the foot is again brought to its proper position; but, as growth proceeds, there is a want of accommodation of the contracted tissues to the increase in length of the other parts, and thus an abnormal degree of arching is gradually established. The condition of arcuatus develops so slowly that it seldom causes inconvenience until the age of adolescence is reached; relief is then sought from pain in the sole of the foot, and from reflex muscular spasm extending up the front of the leg, both of which symptoms are chiefly due to the formation of corns beneath the heads of the metatarsal bones.

Talipes arcuatus is a very common affection, and its diagnosis ought to present no difficulty; nevertheless the condition is often overlooked, and the symptoms it produces are ascribed to the wrong cause. Curiously enough, the mistake is usually made of confusing arcuatus with flat-foot. In palliation of this error, it must be remarked that there is no standard degree of arching of the human foot; a natural arch in one subject will present a similar external appearance to an arcuated foot in another individual, yet the one is normal and the other abnormal, the difference being that the one foot spreads freely when placed upon the ground, whilst the other is constricted by shortened bands of fascia. The pain caused by arcuatus is not infrequently ascribed to rheumatism; but the corns on the front part of the foot, the string-like bands of fascia, and the loss of treading surface ought to indicate the real source of trouble.

For the relief of arcuatus, it is necessary to divide the contracted bands of fascia and to keep the foot fully extended in a suitable instrument for a period of about three weeks. The subject may then be allowed to use the limb, and the normal shape of the foot will gradually become restored, care being taken that properly fitting boots are worn.

Talipes Plantaris.

The case illustrated by Fig. 2 is an example of one of the most common forms of paralytic deformity, talipes plantaris; it is an aggravated condition of arcuatus, and forms a connecting link between the latter and talipes equinus. In this more severe state of distortion the sole is contracted and the arch is deepened, as in the case of arcuatus, but the front of the foot is also depressed below the level of

the heel. The early condition described as present in the slighter deformity has here become permanently established. The iniatory nerve lesion in childhood which leads to the development of talipes plantaris causes a degree of muscular paralysis which at once attracts notice. The muscles of the leg and foot are all implicated, but the extensors of the toes and the tibialis anticus are especially affected; falling of the front of the foot again occurs, with contraction of the plantar fascia, and in many cases also of the flexor brevis digitorum muscle. Lameness continues for a somewhat lengthened period, and the anterior muscles never recover sufficient strength to raise the depressed portion of the foot to its normal position. Recovery of walking power is, however, eventually obtained to such an extent that the displacement of the foot escapes notice until about the age of five or six years, by which time growth will have increased the deformity. When brought for treatment, large bands of contracted tissue will be found stretching across the sole, drawing the front part of the foot downwards and backwards. These must be freely divided, and the foot restored to shape by subsequent mechanical treatment.

FIG. 2.

Talipes Equinus.

Talipes equinus, the result of paralysis, presents three different conditions of deformity, of one variety of which examples are shown in Figs. 3 and 4. These cases arise from muscular disturbance of a like, but of a more severe, nature to that which produces arcuatus and plantaris. The foot illustrated by Fig. 3 is a case of well-marked equinus, while Fig. 4 is the most extreme state of this form

FIG. 3.

FIG. 4.

of distortion. The part of the foot in front of the os calcis and astragalus is here bent nearly at a right angle upon these bones, and the treading surface is limited to the heads of the metatarsal bones and the toes. In this severe condition of deformity the soft parts in the sole are much shortened, the plantar fascia and the extensor brevis digitorum muscle forming a mass of contracted tissue, which chiefly contributes to the maintenance of the deformity. The fibres of the deeper layers of muscles are also shortened, and the ligaments which connect the os calcis and astragalus with the other bones of the tarsus are similarly affected. The cuboid and scaphoid bones are partly disarticulated, being drawn downwards and backwards to an extent proportionate to the amount of deformity, and the head of the astragalus projects prominently on the dorsum. The development of this form of equinus is preceded by an attack of paralysis, which greatly affects all the muscles of the leg and renders the flexors of the foot almost completely powerless; the extent to which the latter muscles regain their contractile power regulates the degree to which the foot becomes distorted. In Fig. 3 it will be seen that the toes are drawn upwards and backwards, presenting the appearance of claws; while in Fig. 4 their under surfaces lie flat upon the ground, and they are straighter than the toes of a normal foot; the difference in this respect is due to the extensors of the toes having partially recovered power in the less severe case, while in the more advanced type of deformity the loss of function has been permanent. Section of the contracted plantar tissues must be performed for the relief of this distortion, care being taken that no resisting structures are left undivided, which may prevent the replacement of the foot by mechanical treatment; not infrequently, in the most severe type, it is necessary to operate a second time, and when this is required it is advisable to make the second section either in front of or behind the first point of operation.

The condition of deformity in each of the last two cases depended upon structural changes within the foot itself. In Figs. 5 and 6 we have examples of another variety of equinus, in which the distortion consists of extension of the foot upon the leg. This, the least common of the three

FIG. 5.

FIG. 6.

different forms of paralytic equinus, results from an attack of paralysis, which deprives the flexor muscles of the foot of their contractile power to a degree which renders them almost useless, but leaving the extensor muscles very slightly affected. The latter muscles, being entirely unopposed, at once become contracted, and soon bring the foot to a state of full extension, as in Fig. 5, maintaining it in this position so that the movement of flexion is lost. In the case illustrated by Fig. 6 the foot has been dragged to a position of hyper-extension, the astragalus being dislocated forwards from the ankle-joint. In these two cases, again, it will be seen that in the less severe example partial recovery of the flexor muscles of the foot is indicated by the claw-shaped toes, but that in the extreme example of deformity no retraction has taken place. Section of the tendo Achillis is required in order to place the foot in its normal position. To the course of treatment to be pursued after operation I shall refer more fully hereafter.

A state of slight shortening of the tendo Achillis, which merely results in limitation of the movement of flexion at the ankle joint, is described in text-books under the title "right-angled contraction of the tendo Achillis." The chief interest connected with this condition is centred in the fact that it may lead to the development of certain forms of varus and valgus. It will be convenient to defer for the present the consideration of these cases, which have not received attention by other writers, until the associated varieties of talipes have been described.

The third condition of paralytic equinus is a combination of the two forms previously described; it is the most complicated of the three varieties, and is perhaps the most frequent of occurrence. Fig. 7 is an example of this distortion, the dual deformity of which is here clearly displayed; the heel is elevated to an extent corresponding very nearly to that present in Fig. 5, and the contraction of the sole simulates the displacement shown in Fig. 3. The development of this form of equinus is due to an attack of infantile paralysis, with severe loss of power of the flexors of the foot, the posterior muscles being also partially affected. The contractile power of the anterior muscles is very imperfectly restored, and hence the front of the foot becomes depressed, as in the first state of equinus; the defective condition of the extensor muscles persists for some time, but eventually sufficient recovery occurs to enable them to raise the heel to a moderate extent.

FIG. 7.

Fig. 8 is an illustration of the most advanced stage of combined form of equinus existing in a girl seventeen years of age. This severe degree of distortion is greatly contributed to by the weight of the body bearing upon the affected foot. The foot shown in Fig. 7, which was that of a girl eight years of age, would, if not previously relieved by treatment, have assumed with time the characteristics of this case. The displacement of the astragalus is here very marked, the head of the bone appearing prominently on the dorsum of the foot; the bone is pushed forwards from the articular surface of the tibia, and the scaphoid is also dragged away from its anterior surface. The metatarsal bones spread out under the pressure to which

they are subjected, and the front of the foot becomes much widened—a change which is at once noticed when viewing the foot in front, but which is, of course, not shown in the lateral view given by the illustration. The formation of corns, with great induration of the skin and subcutaneous tissue, beneath the heads of the metatarsal bones, is common to all cases of equinus; this thick pad is an exaggeration of the normal structure of the heel, and is developed to serve the same purpose.

FIG. 8.

FIG. 9.

The treatment of the combined form of equinus must be undertaken in two stages; the shape of the foot is first restored by the measures adopted in a case of the first variety, and when this is accomplished the contraction of the Achillis tendon is relieved, and flexion of the foot upon the leg obtained, as in the treatment of the second condition of equinus. Fig. 9 shows the result of treatment in the case illustrated by Fig. 8.

(To be continued.)

HÆMORRHAGE IN SALICYLISM.

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IN the Guy's Hospital Reports for 1886–87, I adduced some reasons in support of the view that other hæmorrhages besides epistaxis, which had been so frequently observed, were occasional accidents during the administration of large doses of salicylate of soda in the treatment of acute rheumatism. The cases there recorded at length to illustrate this fact were one of retinal hæmorrhage and two of hæmaturia. During the last year there have occurred at Guy's Hospital two instances of a similar result of this treatment, in both of which the bleeding was from the gums. By the courtesy of the physicians who had charge of the cases I am allowed to put them on record.

CASE 1.—Annie P——, aged twenty-seven, married, was admitted under the care of Dr. Goodhart on Sept. 13th, 1888, suffering from a first attack of acute rheumatism. There was a very good family history, and the patient had never been laid up with any illnesses except her confinements. Her present illness began one week before admission, and appeared, when the patient was first seen, to be a typical attack of acute rheumatism. Several joints were red and swollen; there was no cardiac complication and no albuminuria. The temperature was 101°, and did not exceed this at any time during the disease. She was at once ordered twenty grains of salicylate of soda in a mixture of liquor ammoniæ acetatis and water every three hours. The pain and fever were so far subdued by this treatment that on the 17th the medicine was ordered to be given every six hours. On the 21st it was altered to three times a day. At this time the patient suffered slightly from deafness, singing in the ears, and hallucinations of hearing. On the 24th profuse bleeding from the nose and gums began. The bleeding continued in varying quantity until the 28th, that from the gums being the more severe. Altogether she lost a large amount of blood, becoming pale and weak, with a small rapid pulse. Large clots collected in her mouth, and her motions were blackened, apparently from swallowed blood. When the hæmorrhage began, the salicylate was stopped, a solution of tannic acid was ordered as a mouth wash, she was given ice to suck, and a mixture containing twenty-five minims of tincture of hamamelis and ten minims of tincture of perchloride of iron was prescribed. On the next day, with the view that the hæmorrhage might be a manifestation of a purpuric or scorbutic tendency, lemon-juice was ordered. As before mentioned, the hæmorrhage entirely ceased on the 28th, and from that time the patient did well until Oct. 5th, when a slight relapse of the articular inflammation occurred, there being pain in one wrist, with a temperature of 99°. Ten grains of salicylate of soda were ordered three times a day. The next day at noon the bleeding from the gums began again. It was not nearly so severe as on the previous occasion, and ceased on the evening of the same day, the salicylate having been stopped and similar measures taken to arrest it. The patient left the hospital on Oct. 9th, quite well. The patient stated that she did not remember that her nose or gums had bled on any previous occasion. In the intervals between the attacks of hæmorrhage the gums were not spongy, nor easily made to bleed. At no time were purpuric spots observed upon her legs.

CASE 2.—William H——, aged twenty-six, a porter, was admitted into Guy's Hospital, under the care of Dr. Pavy, on May 23rd, 1888. He had previously enjoyed good health except for slight headaches. The family history was good. The present illness began a fortnight before admission with pains in the limbs, and when the patient was first seen he presented the symptoms of a moderately severe attack of acute rheumatism, there being inflammation of the knees, shoulders, and hips, with a temperature of 102·4°. There was no cardiac complication, and no albuminuria. The patient was at once ordered twenty grains of salicylate of soda in peppermint water every four hours, and on the 25th the medicine was ordered to be given every two hours. On the 26th it was noted that the patient was sweating profusely, that there were inflamed sudamina on his chest, and that he was very deaf; so that, in the course of the day, the medicine was prescribed every four hours, as at first. On June 1st salicine in twenty-grain doses was substituted for the salicylate, the mixture being taken every three hours; and on the next day the following note was made: "The patient is breathing noisily twenty-five times per minute, his face is cyanosed, and there is abundant perspiration on his forehead and chest. His gums are spongy, and bleed on the slightest pressure. The tongue and palate are covered with large hard crusts of blood, which has evidently been oozing for some time. The pulse is soft and regular, 88 per minute." This hæmorrhage from the gums continued till June 6th, when it was noted that the clots of blood had disappeared from the tongue, though the gums still bled on pressure. On this date the salicine was ordered to be given every six hours. From this time the patient made a slow recovery, having a slight relapse on the 14th, on account of which the salicine, which had been for some days taken only three times daily, was again taken every six hours. Two days after this change the patient had a slight return of the bleeding from the gums. This and the relapse of joint trouble lasted but a short time, and the patient was discharged cured on June 16th. For a few days during his stay in the hospital a soft systolic bruit was heard at the apex of the heart.

The treatment of acute rheumatism by salicine and its derivatives is so widely popular that it is of great importance to consider carefully any drawbacks there may be in its adoption, especially if by so doing we may remove them. It might perhaps be urged that the hæmorrhage in the two cases related above was not the result of the drug administered, but was either a purely accidental occurrence, or was a manifestation of the purpuric tendency in rheumatic patients. Against such a suggestion I would point out that in these particular cases the symptom did not occur at the height of the fever, but at a time when its severity was already subdued by treatment, and the patient was suffering from one or more of the well-known toxic effects of the remedy. Moreover, the recurrence of the bleeding when the drug was re-ordered or its dose increased in frequency seems to make the causal relation between the treatment and the symptom as clear as such relations ever are in medicine. It appears also to be reasonable to expect that, if patients bleed at all as a result of salicylism, they should do so from their gums, which are so liable to bleed in all hæmorrhagic states. That they do suffer from epistaxis is established beyond all doubt; the occurrence is mentioned by nearly all writers on this subject, and the fact was freely accepted by the physicians who took part in the discussion at the Clinical Society in 1881. Of 174 patients treated at Guy's Hospital by these drugs,

and particulars of whose cases I tabulated in the paper already mentioned, I found that 6 per cent. were recorded to have had this symptom. Thus the difficulty is not to establish the existence of the hæmorrhage, but to satisfactorily explain how it is produced. In the first cases which I observed, I was struck by the bounding pulse which preceded the bleeding, and thought that some increase of arterial tension might be an important agent, but a more careful investigation showed that, although the pulse was large and forcible, it was of decidedly low tension, a fact which was confirmed by sphygmograms taken before, during, and after the period when the patient was thoroughly under the influence of the drug. It seems, therefore, that we must fall back upon some chemical or physical change in the blood which makes it more readily transude through the capillaries, or else upon some secondary change in the walls of the vessels themselves. The point of practical importance to which I would call attention is this. Although I have carefully watched these cases for some years, I have never observed epistaxis or any other hæmorrhage occur until several hours, and generally not until some days, after the more common symptoms produced by too large a dose have been well marked. These symptoms are deafness, headache, vomiting, tinnitus aurium, and an irregular and slow pulse, this being the order of frequency with which they occurred in the series of 174 cases before referred to. It would therefore seem that if due regard were paid to these indications that the drug is beginning to produce its physiological effects, and an appropriate alteration made in the dose, the occurrence of loss of blood, which the patient can so ill afford, might be prevented. Patients differ very much in their susceptibility to these remedies, and the amount by which the dose must be reduced varies directly as the rapidity with which symptoms of poisoning are developed. A point requiring further investigation is whether the rather common practice of substituting salicine for salicylate of soda in identical doses, in cases in which the patient seems intolerant of the latter drug, is a thoroughly reliable proceeding. There is a general impression that salicine is less liable to produce ill effects than other preparations, but recorded cases do not fully bear this out. The chemists tell us that salicine is converted into salicylate of soda in the blood, and that, roughly, twenty grains of the original drug produce fifteen grains of the soda salt, and it is possible that any good effects which follow the substitution of one for the other might equally follow a corresponding diminution in the dose. In reference to this point, it is worth noting that in one of these cases, as well as in one of the fatal cases previously reported, salicine had been substituted for salicylate of soda two or more days before the hæmorrhage occurred.

St. Thomas's-street, S.E.

NOTES OF A

FATAL CASE OF PHENOL POISONING.

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THE following case is thought worthy of publication, partly as being a fairly complete record of the poisonous action of carbolic acid, and partly because, as will be pointed out later on, the effect of the poison, as far as the stomach was concerned, differed in some respects from that described in one of our standard works on Forensic Medicine.

G. D——, aged thirty-six, a night watchman, was brought to St. Bartholomew's Hospital, Chatham, early in the morning of July 14th, in the following condition: Unconscious, collapsed, and smelling strongly of carbolic acid; face pale; pupils slightly dilated; conjunctival reflex absent; breathing shallow and slightly stertorous; pulse weak; lips and interior of mouth of an appearance best described as dirty white. It was stated that, about twenty-five minutes previously, he ran from a place where he had been at work and told a fellow-workman that he had just swallowed some carbolic acid out of a bottle, thinking that it was cold tea. His speech, manner, and gait were then those of a drunken man. With assistance he was able to stagger to the hospital, a distance of rather more than a quarter of a mile. On arriving at the gate he made an ineffectual attempt to vomit, and immediately became unconscious. Some sulphate of zinc was first given, and then a full dose of apomorphia was injected subcutaneously, in order to clear out the solid contents of the stomach preparatory to washing it out. As no vomiting occurred within a minute or two, and there was obviously no time to spare, the stomach-pump was at once used and the stomach well washed out with warm water, the portions first ejected being of milky appearance. After the stomach had been thoroughly washed out, it was seen that the man's general condition was rapidly becoming worse. Artificial respiration and subcutaneous injections of ether were then resorted to; without avail, however, for the patient died within twenty minutes of being brought to the hospital. The liquid swallowed was a crude preparation of a dark-brown colour, stated to contain 90 per cent. of pure carbolic acid, and used for disinfecting drains. The quantity swallowed was something less than three ounces.

Necropsy (made nine hours after death; day cool).—Strong smell of carbolic acid noticeable about the body; slight hypostatic staining on the back and legs. Rigor mortis was present in a somewhat remarkable degree, it being with the greatest difficulty that the jaws could be forced open in order to inspect the mouth. There was a rather large stain of a light-brown colour at the right angle of the mouth. The oral mucous membrane presented the same appearance as that observed before death. Heart empty and very firmly contracted. Lungs normal. Liver much congested, and weighing 65 oz. Stomach slightly distended with some of the water used in the washing out, smelling strongly of carbolic acid; it contained no solid matter, and therefore, as no vomiting had occurred, had been empty at the time the accident happened. The peritoneal surface was much injected and mottled. The mucous membrane was of an ash-grey colour, apparently disorganised through its whole depth, corrugated and stiffened, with a faint pinkish staining between the rugæ here and there. These changes were more intensely marked at the cardiac than at the pyloric end. All over the surface of the mucous membrane were scattered small whitish elevations about the size of pin-heads, and easily detached from the subjacent surface. Examined under the microscope, they showed no definite structure, and were probably the result of the continued action of the acid upon minute blebs filled with coagulated serum. The duodenum was full of semi-digested matters, and in its first two inches or so presented slight traces of the action of the acid. The external coat of the œsophagus was congested; the attachment of the muscular to the mucous coat was loosened. The mucous lining was of a darker grey than that of the stomach, smooth, with an almost pearly lustre, but with well-marked longitudinal striation, similar to that sometimes produced by mineral acids. The brain and cord were not examined. Abdominal viscera not mentioned above were normal.

The first point to be noticed is as to the use of the stomach-pump in poisoning by corrosives. The general tendency of opinion is against its use in these circumstances, whilst the administration of emetics is allowed. But surely (unless, indeed, we presuppose an almost unpardonable display of clumsiness on the part of the operator) the vomiting following an emetic is not less likely to cause a rupture of the more or less disintegrated stomach than is the careful passage of an oiled flexible œsophageal tube to lead to its perforation. In practice, I believe, the best plan is first to give an emetic to evacuate the solid contents, which will greatly facilitate the next step, a good washing out with the stomach-pump. For, after all, a full stream of water is the quickest and most certain way of neutralising the poison. In exceptional cases, when œdema of the pharynx has supervened, or when convulsions, which are not common with this class of poisons, are present, we possess an excellent alternative to the ordinary stomach-pump in the shape of a soft rubber tube with a funnel, used syphon-wise. Where there is obstruction, a tube of fine calibre may be used; and when strong convulsions are present, the greater flexibility and perfect softness of the rubber tube will prevent the patient from injuring himself. The explanation of the failure of the apomorphia in this case was found when the solution used was examined by daylight; it was then seen that it had changed colour, and therefore presumably had decomposed.

A further fact to be noted in connexion with the case immediately under consideration was the state of the

stomach and œsophagus. Drs. Guy and Ferrier[1] state: "The mucous membranes of the mouth, gullet, and œsophagus are pale, corrugated, sodden, and partially detached, and marked by local patches of hyperæmia or capillary hæmorrhage." So also Dr. Stevenson,[2] speaking of carbolic acid, says it "whitens and shrivels the membranes with which it comes in contact." Neither of these descriptions would fairly have described the state of things in this case. So far from being sodden, the lining of the stomach had a distinctly stiffened feeling, and its colour was a light grey, the œsophageal lining being considerably darker. The mucous membrane of the mouth could alone have been described as pale or white. These differences, however, might well be due to varying strength and quantity of the acid swallowed, and to a longer or shorter interval before death. Nor are they, indeed, of any practical importance, for the distinctive and enduring smell of the poison will by itself prevent a mistake as to its nature ever occurring. It may, perhaps, be worth while to add that the symptoms which presented themselves previously to the onset of insensibility, as narrated by an intelligent witness, bore a strong resemblance to those observed in a case of benzoline poisoning, published by me some little time ago,[3] and justify to a certain extent the position that carbolic acid and benzine hold in Guy and Ferrier's classification, forming a subgroup of inebriant poisons. At the same time it would (in this case, at least) have been extremely hard to decide whether carbolic acid had greater claim to be considered as a neurotic or as a corrosive poison—an instance of the somewhat unsatisfactory nature, even from an empirical point of view, of the only classifications of poisons possible in our present state of knowledge.

FOREIGN BODIES IN THE AIR PASSAGES.

BY JOSEPH COLLIER, B.S., F.R.C.S.
ASSISTANT SURGEON TO THE HOSPITAL FOR SICK CHILDREN, PENDLEBURY, MANCHESTER.

THE entrance of a foreign body into the air passages, which in almost all cases takes place by inhalation, is an accident so serious, and calls for such prompt and accurate treatment, that it is well to have as many cases recorded as possible. This, perhaps, is additionally indicated, since the mishap is by no means common, and since there would seem to be no two cases exactly similar either in symptoms or progress. All authorities are agreed as to the advisability of not being lulled into a false security by the apparent comfort of the patient, but urge the immediate performance of tracheotomy in every case where the foreign body is diagnosed as present below the larynx. But they are not equally agreed as to the virtue of any thorough examination of the upper air passages after the trachea has been opened, nor as to the extent to which search for and attempted removal by forceps should be carried. From an experience of several cases during the last few years, it is herein desired to urge the unwisdom of much meddling in the way of attempts at extraction by instruments, and as supporting evidence one case is detailed. After, but not before, free incision has been made into the trachea, a good inversion and succussion may be safely tried, and are especially likely to succeed if the foreign body is heavy and smooth; but prolonged attempts with instruments may not only drive further down and fix more firmly the foreign body, but are almost certain to set up such an amount of irritation as will probably induce, especially in children, catarrhal pneumonia of fatal virulence.

W. R——aged six years, was admitted into the Manchester Royal Infirmary on May 30th, 1886, under the care of Mr. Whitehead. It was stated that the boy had been holding in his mouth a used percussion cap, when for some reason his mother had struck him on the back. He seemed to have inspired deeply on receiving the blow, and then discovered that the cap was no longer in his mouth, nor could it be found. He immediately had several short but severe attacks of coughing, which subsided after about ten minutes and had not returned. On examination at the hospital he was breathing quietly, and the physical signs on both sides of the chest were apparently perfectly normal. He, however, complained of pain just above the sternum, and was continually grasping his throat with the right hand. From the uncertainty due to the absence of more definite symptoms, and to there being only the boy's statement as to the presence of the cap in his mouth, it was thought unjustifiable to perform immediate tracheotomy, but the patient was carefully watched, and preparation made to open the windpipe at once should urgent symptoms arise, or should the diagnosis of the foreign body being in the air passages become certain.

The patient slept well during the night, but next morning (May 31st), after a severe attack of coughing, examination showed that there was some obstruction to the entrance of air into the right lung. There was at first a peculiar shrill noise to be heard over the situation of the right bronchus, and the breath sounds were somewhat feeble over the same side. A few minutes later the shrill noise was no longer heard; the breath sounds on the right side were almost inaudible, movement almost imperceptible, and on percussion that side was hyper-resonant. The presence of a foreign body seemed now to be certain, and it seemed equally certain that the body had entered the right bronchus, at first partially and later almost completely obstructing the air flow. While being prepared for tracheotomy a fit of coughing again came on, and on subsiding left the chest, as far as physical signs were concerned, once more normal.

Mr. Whitehead performed tracheotomy by the method described by him in THE LANCET of April 30th, 1887. An incision rather over an inch in length was made into the trachea, and through it a single futile attempt to feel the cap with a probe. No hard metallic substance, however, could be felt either in the trachea or the upper part of either bronchus. The wound in the trachea was kept open by passing a stout silver wire through the cartilage at the margin of the incision on each side, and fastening the wires with a tape behind the neck. In the coughing which followed the operation nothing was seen of the cap, and at the end of three days the silver wires had cut through the cartilage. In the absence of Gross's hooks or Golding Bird's dilator, a full-sized indiarubber tracheotomy tube was inserted for a portion of each day. A large aperture was made in the part of the tube looking towards the larynx, in order that breathing might be possible in at least one direction should the cap be coughed up.

The temperature rose slightly for a few days, and there was profuse, thin, sero-mucous expectoration for a similar period. On June 14th, on removing the tube, an attack of coughing ensued, and by closing the throat wound and asking the boy to speak, it was found that the voice was rough and sibilant. The laryngoscope showed a dark substance in the rima glottidis. A Baker's indiarubber tube was replaced to prevent the body slipping back towards the lungs, and in pulling the tongue further forwards to obtain a better view of the larynx the body was released from between the vocal cords. As it was thus imprisoned in the upper part of the trachea, a pair of sinus forceps was inserted into the Baker's tube and expanded horizontally so as to block up the full lumen of the windpipe. The tube thus held was then inclined downwards in front and the percussion cap glided through the wound. It was a flattened copper cap, and was quite black. The boy made an uninterrupted recovery, the wound in the neck rapidly healed, and he left the hospital on June 24th.

Manchester.

[1] Principles of Forensic Medicine, 1880.
[2] Quain's Dictionary of Medicine, art. Poisons.
[3] THE LANCET, Nov. 6th, 1886.

DEVONSHIRE HOSPITAL, BUXTON.—The report submitted to the annual meeting of the trustees and subscribers held on the 6th inst., sets forth that 2459 in-patients had been received (seventy more than in the previous year). The number of out-patients was 215. The general result of the medical treatment was very satisfactory. The financial position showed slightly increased receipts under various heads, one of which being an account of the patients under the powers of the governors of the Cotton Districts Convalescent Fund. The revenue had amounted to £6660 11*s.* 4*d.*, including £1203 19*s.* 5*d.* from the Cotton Districts Convalescent Fund, and £2745 from annual subscriptions. The expenditure was £6025 16*s.* 2*d.*, and £136 10*s.* had been placed to the estate account.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

CASE OF MENINGEAL HÆMORRHAGE DUE TO INJURY, WITHOUT FRACTURE OF THE SKULL, IN WHICH RECOVERY FOLLOWED TREPHINING AND REMOVAL OF THE CLOT; REMARKS.

(Under the care of Mr. JOHN CROFT.)

FEW cases present more of interest to the practical surgeon than those in which hæmorrhage between the dura mater and the bone has followed an injury to the head, whether this hæmorrhage be in the region of the middle meningeal artery, its usual seat, or in other parts. Many of the symptoms found in compression of the brain were present in the case which we record below, and to which we drew attention in December, 1887.[1] It is not, however, a typical "text-book" case, as there was no interval of consciousness before the advent of those cerebral symptoms which pass into coma with greater or less rapidity in the majority of such cases. In this particular instance it was not possible to diagnose the presence of hæmorrhage until the hemiplegia developed. The patient had been drinking, and was suffering from the effect of the immediate damage to the head. She was flushed, her respiration was stertorous, pupils equal, &c., and there was a possibility that her condition was due to drink. Jacobson, in a memoir[2] on Middle Meningeal Hæmorrhage, says that in about a third of his collected cases there was no interval of consciousness, which has varied in recorded instances from fifteen minutes to nine days before the advent of coma. Hutchinson[3] regards the regaining of consciousness as more frequent and a most important symptom in the history. It may be absent also when the opening in the vessel is of large size and the blood quickly poured out. These cases frequently run a rapid course. It is curious to note how slight the injury may be which is sufficient to start a fatal hæmorrhage; a blow in the temporal region, not producing any change in the mental equilibrium even of momentary character, may be followed by an extensive and, if unrelieved by operation, fatal hæmorrhage. There may be no fracture, as in this case, or only a fissuring of the inner table; whilst the part struck may only indicate the presence of a slight bruise or small wound. It is important to remember this fact, for on more than one occasion a surgeon has refused to trephine, having found the bone uninjured on close examination, and the patient has died unrelieved. Sir Charles Bell drew attention to this point in his "Surgical Observations."[4] As regards the treatment of the clot, it is considered advisable to remove as much as possible, and that by early operation. Its source varies; usually due to laceration of either the main trunk of the middle meningeal or its anterior divisions, it may follow rupture of some posterior branches. In two out of sixty cases no laceration of artery was found. An instance is recorded in which fatal hæmorrhage took place into the posterior fossa.[5] On removal of the clot much difficulty may be experienced in arresting the hæmorrhage from the wounded vessels, and various methods have been tried—lifting the patient up, then application of ice, and compression of the common carotid. Howse[6] ligatured the external carotid, and Liddell[6] the common carotid. Ligature of the external carotid, when other methods fail, is also recommended by Symonds,[7] who left artery forceps on the vessel. We do not find anywhere mention of elastic pressure by means of antiseptic sponges as employed by Mr. Croft. Jacobson gives the successful cases of trephining for meningeal hæmorrhage as follows: Guthrie, three cases, 1812; Tatum, 1812;[8] Keate, 1839; Cock, 1841;[9] Watson, 1856;[10] Erichsen, 1878;[11] Adams;[12] Howse, 1884; Swain, 1885.[13] He also refers to two cases by Hill of Dumfries, 1750-1751. A former case by Mr. Croft, to which he alludes in his remarks, has been overlooked.[14] A youth aged eighteen fell on the deck of a ship; he was unconscious, and continued so until the operation. There was no external wound. A starred fracture was found, and a large coagulum removed from under it. Before the operation there was paralysis of the arm and leg, and the pupils were equally large. Complete recovery resulted. Others have also been published during the last three years. At the Medical Society,[15] Mr. Davies-Colley related the case of a carman, aged fifty-three, who was trephined by him on the eleventh day after an injury to the head, followed by paralysis, and a large clot removed. Dr. Calder[16] of Leith trephined on the third day for increasing unconsciousness, pain and swelling above and in front of the right ear, with ptosis, external squint, and dilated pupil. The man, aged twenty-six, made a rapid recovery. Those wishing to become fully acquainted with the literature on this subject cannot do better than consult the writings of Jacobson, Hutchinson, Wiesman of Zürich (who summarises 278 cases), and the lectures by Sir Prescott Hewett.[17]

C. S——, aged thirty-one, married, was admitted about midnight on Dec. 10th, 1887. She had been knocked down and kicked by a horse half an hour before admission. She was unconscious, and the pupils did not act to light. She moved slightly when the supra-orbital nerves were compressed, and when an attempt was made to examine her eyes she used both hands to push away the surgeon. There was a lacerated and contused wound of the scalp about an inch and a half long behind and below the left parietal eminence, but no fracture was detected. During the early morning the symptoms of compression became more marked, and later in the morning paralysis of the right arm and leg was observed. The face was not affected.

Mr. Croft, who was sent for, saw the patient at 3 P.M. of the 11th. The paralysis remained the same. The left arm was frequently moved. The pupils were contracted and equal. Pulse 160; respiration 30 to the minute, and stertorous. Trephining was at once resorted to. The scalp wound was such that it appeared to negative the use of a valvular flap of the scalp. The trephine was therefore used in the situation of the original wound when it had been sufficiently extended. On removing the circle of bone part of an extended clot was exposed. This was black and granular, of characteristic appearance, and weighed about two ounces and a half. Another circle of bone was taken out in front of the first. When the greater part of the clot had been scooped and syringed, arterial blood was found to well up from the posterior part of the opening, probably from a posterior branch of the middle meningeal artery. The bone was cut away in this direction for another inch or more until the source of the bleeding could be reached. As no vessel could be seized by forceps, sponge (antiseptic) pressure was employed. Antiseptic silk was attached to each compress. The edges of the skin were brought together in the form of a cross, drainage provided, and the dressing completed antiseptically. The dura mater had not been punctured or torn, though it had been detached extensively. Within six hours the right leg showed signs of returning power.

At 10.30 on the morning of the 12th, or within twenty hours of the operation, the patient was less unconscious. A little later she began to be restless, drawing her legs up and trying to sit up in bed. On the morning of the 14th she was more conscious, and when spoken to answered "yes" to several questions. This was the first occasion of her uttering any articulate sound. During this time the progress of the wound was aseptic. The plugs were removed

[1] THE LANCET, vol. ii. 1887, p. 1285.
[2] Guy's Hospital Reports, 1885, p. 145.
[3] London Hospital Reports, vol. iv., p. 51.
[4] 1816, p. 466. Of seventy cases collected by Jacobson there was a fracture in sixty-two.
[5] Med. Times and Gazette, 1875, p. 337. (No fracture.)
[6] Clin. Soc. Trans., 1885. [7] 1862, after shell wound; recovered.
[8] System of Surgery, vol. i., p. 576.
[9] Guy's Hosp. Reports, 1842, p. 157.
[10] THE LANCET, vol. ii. 1856, p. 249. [11] Ibid., 1878, Clin. Lect.
[12] Cooper's Dictionary, vol. i., p. 916.
[13] British Med. Jour., Dec. 12th, 1885.
[14] Med. Times and Gazette, 1857, p. 500. [15] March, 1888.
[16] British Medical Journal, vol. i. 1889, p. 74.
[17] Medical Times and Gazette, vol. ii. 1855, p. 79 et seq. THE LANCET, 1878, p. 1.

without any recurrence of hæmorrhage. The contused edges of the wound failed to unite. Although the cranial wounds followed an aseptic course, and the head symptoms steadily improved, the temperature rose and kept about 100° until the afternoon of Jan. 16th. The cause of this condition of febrility was in a lacerated and contused wound in the right groin; it suppurated. When it had been properly drained and dressed the temperature subsided. On the fourth day she was able to recognise her friends. She was occasionally very restless, pulling at the dressings on her head and trying to get out of bed. She frequently said, "Oh, I do feel so bad!" or "Oh, my poor head!" In the afternoon of the day she passed urine naturally for the first time since the accident. On the fifth day she was troubled with diarrhœa. On the sixth day, as she appeared to be flagging locally and generally, some stimulants were ordered. On the twelfth day she was less unmanageable and less restless. She called for her little boy at the top of her voice. She did not always call attention to her wants. On the fifteenth day she was quite free from any febrility, but restless and peevish and contrary. She spoke more clearly, but used wrong words. The wound was slowly healing in the central part, where the lacerated contused edges had disintegrated and suppurated. On Jan. 6th she had frequently some trembling movements in the left leg, and these had been observed more or less since the third day, but they had been transient and painless, and never followed by any loss of power. They were now less frequent and milder than they were at first. She had all along required morphia to subdue her restlessness and to procure sleep. After the above date she began to sleep better and the diarrhœa became less frequent. On the 12th lucid intervals were observed, and during them she talked rationally. On the 15th she recognised her husband. On the 21st, or forty-one days after the operation, she could write legibly and intelligibly, but with such little mistakes in spelling as "Carilione" or "Carilone." On the 23rd the eyes were examined with the ophthalmoscope. The optic discs and retinæ were pronounced healthy. The improvement was steadily maintained from this date. She could read and keep up her attention to the subject she was reading. She slept fairly well at night. The wound healed in the central part by granulation, sinuses remaining open in communication with pieces of dead bone which were separating from the posterior part where the bone forceps had been used. On Feb. 3rd she got up for the first time. She might have been allowed up earlier than this so far as the head wound was concerned, but the state of the healing wound in the groin had not permitted her moving about. She was kept in the hospital under observation until May 8th. As she seemed then to be fairly well able to take care of herself and to manage her own affairs, she was allowed to leave the hospital. She was provided with a metal plate to protect the injured part of the head. Since then she has changed her lodgings and has been lost sight of.

Remarks by Mr. CROFT.—The remarks on this case may be arranged under the two heads of diagnosis and mode of operating. Under the first head there is little to be said, as the symptoms of compression were sufficiently definite and uncomplicated to indicate pressure from extravasation of blood between the dura mater and bone, and the symptom of paralysis of the right arm and leg was sufficiently marked to enable one to localise the situation of the blood-clot independently of the presence of the scalp wound. Under the second head there is more to be said, for it involves the consideration of the best way to deal with a lacerated and contused wound of the scalp when it is situated in the middle of the flap which the surgeon would wish to raise off the region of skull to be trephined. A wound of such a character as the one in the case narrated presented serious difficulties in, and obstacles to, obtaining primary union in all parts of the flap where such a mode of union is particularly desirable. The edges of the wound were cleaned and freshened, and sutured with a view to obtaining a watertight covering to the trephine boles, but the effort failed. The consequence of this perforation in the flap was that that portion healed by a slow process of granulation and cicatrisation based on the dura mater itself. I would advise that in such cases the bruised edges should be freely trimmed and carefully sutured, and that before laying down the flap plastic surgery should be brought into requisition so that primary union between the flap and the dura mater may be surely secured. Where the periosteum corresponding to the scalp wound has been injured, it should be cut away, for if left it will prove an obstacle to rapid healing. In this case it will have been noticed that necrosis took place at the edges of the bone, where bone forceps had been used to clip and cut away the hard adult bone. I am inclined to think that the saw is the preferable instrument, as it is less likely to lead to necrosis, and therefore it is better adapted to promote rapid healing of the wound. The success following such severe injuries as that of C. S—— does not bear comparison with the brilliant and rapid results of trephining where there is no scalp wound, and particularly the results of trephining for tumours of the brain; for in such cases, if Mr. Victor Horsley's plan of operating be carefully followed, complete primary union should be the rule. The first case in which I trephined for compression and paralysis from blood-clot was performed in the days before antiseptic surgery—viz., in 1857. The result was perfectly successful, although no antiseptics were used.[18]

SAMARITAN HOSPITAL FOR WOMEN, BELFAST.

SIX CONSECUTIVE LAPAROTOMIES FOR CYSTIC DISEASE OF THE UTERINE APPENDAGES; REMARKS.

(Under the care of Dr. MCMORDIE, M.Ch.)

WE are somewhat surprised to find from Dr. McMordie's remarks that medicinal treatment for, and tapping of, ovarian cysts is so much relied upon by the profession in Belfast as means of cure. We shall be pleased to know the experience of other members of the profession in that city on the subject. In England, tapping of an abdominal cyst of pelvic origin is rarely employed, and then only where there is a probability of its having commenced in the broad ligament, or where the case is urgent from dyspnœa. Continued experience has only confirmed the opinion that tapping affords but temporary relief, and is not devoid of serious risk to the patient. There is no remedy known which exercises any effect on the growth of ovarian tumours; the only use of medicine in such cases is to improve the general health or correct coexisting disease. Dr. McMordie makes a serious charge.

CASE 1.—M. A——, aged thirty-eight, married, with seven children, the last one born two years ago. She was sent to the hospital for operation by Dr. Dundee of Ballycarry. She had been tapped four times. The tumour consisted of one large cyst with a solid base. The solid part of the tumour was steadily increasing, and was found to be larger after each tapping. An operation was performed on July 11th. The cyst contained five quarts of dark thick fluid, and the solid part weighed 4 lb. She made an excellent recovery, and returned home on August 15th.

CASE 2.—M. H——, aged forty-five (no family), underwent operation on July 18th. The left ovary, which was enlarged, cystic, and displaced in Douglas's pouch, was removed for deep-seated persistent pelvic pain, resisting all manner of treatment for eighteen months. Discharged perfectly free from pain on August 20th. Has remained well ever since.

CASE 3.—K. D——, aged thirty, single, was admitted on Aug. 7th. The growth of the tumour was of four years' standing. During that time she had been treated medicinally by several doctors in her native town of Newtownards. In this case medicine had been solely relied upon, and the aid of tapping was not called in. Afterwards a friend sent her to the Samaritan Hospital. She underwent operation on Aug. 22nd. There was a simple cyst on the right side, without adhesions, containing seven quarts of clear fluid. She made a good recovery, and was discharged in good health on Sept. 25th.

CASE 4.—M. M'G——, aged forty-one, married, with eight children, the last one born six months previously to her admission. She was sent as a private patient to the hospital for operation by Dr. Currie, of Ballymena on Nov. 19th. This case had not been tapped. Enlargement was first noticed in July last. The operation was performed on Nov. 23rd. There was a cyst of the broad ligament, containing four quarts of thin dark fluid, and a quantity of soft material that appeared to be broken-down blood clot. The cyst wall

[18] See Medical Times and Gazette, vol. ii. 1857.

was adherent in all directions, and so rotten that it could not be separated. Had the operation not taken place at this early period, Dr. McMordie considered that suppuration would shortly have taken place. He washed out the cavity with carbolic lotion, and left in a drainage tube. This was repeated daily. The cavity contracted, and the walls united without a trace of suppuration. The cavity is now (Dec. 17th) firmly closed and the wound healed. The bowels act without trouble. This case Dr. McMordie believed to be unique, as he had not seen any similar one reported.

CASE 5.—R. B——, aged twenty-eight, married, with one child born two years ago, was sent to the Samaritan Hospital on Dec. 3rd by Dr. Spedding of Belfast. She first noticed a swelling in the right side shortly after her confinement. Had been tapped since, the last time three months ago. The operation took place on Dec. 4th. There was a tumour on the right side, consisting of two large cysts and three smaller. The largest of the two larger cysts contained a thick yellow fluid, and the others a white gelatinous fluid. The uterus was found to be enlarged, and when tapping one of the cysts the trocar injured the uterus. Blood welled up very freely from the wound, and it was with some difficulty that Dr. McMordie succeeded in stopping it. This was accomplished by suturing deeply, closely, and tightly with fine catgut. He washed it out with warm water, and left in a drainage tube for thirty hours, above and behind the enlarged uterus. On the night after the operation a fœtus, which had evidently been dead for some weeks, was expelled. Before the operation, the possibility of pregnancy was quite overlooked. She made an excellent recovery. The wound healed by primary adhesion, and the sutures (silkworm gut) were removed on the sixth day. There was not one bad symptom. She is now (Dec. 17th) walking about in excellent health. The accidental wounding of the pregnant uterus and the result make this case somewhat interesting.

CASE 6.—S. M'G——, aged fifty-one; two children, the last one born ten years ago. The menopause occurred two years ago. Dr. O'Connor, of Glenarm, accurately diagnosed the case, and sent her to the hospital for operation in August last. On coming to Belfast she was recommended by a friend not to have the tumour removed, but to put herself under the care of Dr. A. She took this advice, and Dr. A. called in the aid of Dr. B, a physician. By his advice she was subjected to a course of medicinal treatment, and this was actively followed up, until she finally came under Dr. McMordie's care. At this time she was much exhausted, partly no doubt owing to the rapidity of growth of the abdominal tumour. The heart's action was very weak, and the specific gravity of the urine only 1015. The growth of the tumour was very rapid. In three weeks it added three inches to the circumference round the umbilicus, measuring forty-six inches; her general condition, especially the state of the urine, contra-indicating any operation. The growth of the tumour was so rapid that she could not long survive, so Dr. McMordie resolved to give her a chance. She was therefore submitted to operation on Dec. 11th. The tumour consisted of a multilocular cyst of both ovaries. Each was firmly adherent to the posterior and upper surface of the bladder, so firmly that on passing the fingers along they felt like one firm, thick, continuous band from side to side. Both were extensively adherent to the large and small intestine and to the mesentery. The tumour extended to near the ensiform cartilage. There was one large cyst containing clear watery fluid. There were several small cysts containing thick gelatinous matter, which it was impossible to evacuate without enlarging the wound. The operator was therefore obliged to make a large incision. The solid part of the tumour weighed 3½lb. The fluid was not measured. The peritoneum was washed out with warm water and a drainage tube kept in for twenty-four hours. There was little rise of temperature; no pain; pulse quick, feeble, and fluttering; vomiting. She remained in this quiet way, no proper reaction ever setting in after the operation. She began to sink at the end of the fourth day, and died ninety hours after the operation from simple failure of the action of a weak heart. The external wound had healed by primary adhesion. There was no post-mortem examination permitted. At each of these operations Dr. Henry O'Neill assisted, and the anæsthetic was administered by Dr. McKenney.

Remarks by Dr. MCMORDIE.—There are difficulties to be encountered in the practice of abdominal surgery in the north of Ireland not met with in any other part of the United Kingdom. Tapping ovarian cysts, especially when simple, is still extensively practised by a large section of practitioners. This goes on in many cases till the patients either die exhausted after repeated tappings for years or from some cause immediately connected with the operation. When the cysts are not simple, the immediate effects of the tapping to the eye are not satisfactory, and the operator may then be called in. Only a percentage of ovarian tumours in the north of Ireland find their way to the operator. Some of the cases I now give present points of interest in themselves. But taken together they illustrate the difficulties besetting the operator to which I have referred, difficulties which render it impossible to obtain a fair average of all classes of tumours for operation. In hospital practice at Belfast, so far as I can judge from reports and papers in the medical journals, there is a smaller percentage of hæmatoceles, affections of the tubes, and extra-uterine pregnancy in 1000 cases presenting themselves for treatment than in the same number of cases at a similar hospital in England. The explanation probably is that the family doctor, with the assistance of the consulting physician, manages these cases with medicinal treatment, while the English family doctor calls in the aid of an operating surgeon. In regard to ovarian tumours, I should say per head of population there would be the same number as in England. Even after making due allowance for the number who go to English operators, I am forced to the conclusion that a very large proportion of those suffering from ovarian and allied tumours in Ireland die unrelieved.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Annual General Meeting.—Conclusion of Debate on Chronic Alcoholism.

THE annual general meeting of the Society was held on Jan. 15th, Sir James Paget, President, in the chair.

The debate on the Pathology of Chronic Alcoholism was continued by Dr. HADDEN, who drew attention to six fatal cases of alcoholic paralysis, which had come under his personal observation, five of which were described in the Transactions of the Society. The spinal cord was normal in all. The nerves were examined in five and found to be degenerated, the change being parenchymatous in three, mainly interstitial in two. The change was usually more advanced in the smaller nerves. In all probability, the neuritis became less intense in the ascending direction. The medulla had been examined twice and the motor convolutions twice, but no change was present. The lesion in the nerves consisted of granular degeneration of the myelin, then partial removal of the products, causing a varicosity of the nerve fibre, and lastly, complete disappearance of the degenerative débris, with collapse of the sheath. In a single preparation all these changes might be found, together with fibres normal or but little changed. He had never examined the nerves for tubercle bacilli. The muscles often showed somewhat imperfect striation with a granular appearance of the fibres, and usually these were local accumulations of nuclei between the fibres. In the six fatal cases the lungs and liver were affected. Phthisis existed in four, miliary tubercles in the lungs in one, softening broncho-pneumonia in one. The association of tubercle with alcoholic paralysis had arrested his attention six years ago, and it was possible that the change was due to lesion of the vagus. In the six cases referred to, there was marked cirrhosis of the liver in four, advanced fatty change in two, in one of which there was early cirrhosis. In cases of alcoholic paralysis he had seen various trophic lesions—such as acute bed-sore, œdema of ankles, bullous and vesicular eruptions, erythema of the palms, loss or arrest of growth of nails, perforating ulcer of foot, and profuse sweats, with swelling of joints. As regarded the influence of alcohol on the kidneys, he had examined between fifty and sixty cases of cirrhosis of liver, and had found interstitial change present in the kidneys in one-third. In only about one-half of this number—that is, about one-sixth of the whole—was the change at all noteworthy. In about one-fifth of these cases of cirrhosis lung changes existed, emphysema and

tubercle being present in about equal proportion. In a few instances there was tubercular peritonitis; in half of these cases the brain was watery. Gall-stones occurred in a significant proportion. Deposit of urate of soda did not occur with much greater frequency than in the general bulk of cases. No doubt alcohol did cause organic change in the kidneys, although its influence in producing the typical granular kidney was indirect. It was noteworthy, however, that, of fifty cases of granular kidney, cirrhosis of liver was present in one only, but in a few there was fatty change.

Dr. J. A. ORMEROD showed sections from a case of typical alcoholic neuritis, which had been under the care of Dr. Andrew at St. Bartholomew's. They showed breaking up of the myeline and overgrowth of the endoneurium, the condition of the axis cylinders being rather doubtful, some being destroyed, others still traceable. The patient died of phthisis, with caseation, cavities, and grey tubercle. There was no change in the pneumogastric nerve terminals, and the tibialis anticus muscle showed only increase of nuclei. Another alcoholic disease of the nervous system had been described by Wernicke and Thomsen. The morbid anatomy was acute, even hæmorrhagic, inflammation of the oculo-motor nuclei. The symptoms were mental disturbance, somewhat resembling delirium tremens, followed by stupor, staggering gait, and progressive paralysis of ocular movements. The course was rapidly fatal. A case of ophthalmoplegia of alcoholic causation had been recorded by Dr. Suckling. It did not terminate fatally, and he himself had seen another such case.

Dr. ISAMBARD OWEN referred to some conclusions arrived at by the Collective Investigation Committee of the British Medical Association, based upon 4234 returns of 178 practitioners in the British Islands, chiefly from England and Wales. Dr. Owen said that an idea had got abroad that the committee had stated that total abstinence was a very bad thing, and that total abstainers had a relatively earlier mortality than drunkards. This, on behalf of the committee, he energetically denied, and stated that they had intentionally refrained from announcing any definite conclusions. The cases were taken consecutively from the death-certificate books of the practitioners; the age, habits, occupation, and cause of death of males of the age of twenty-five years and upwards being given, and, further, a scale of alcoholic habits and the presence or absence of gout. The results showed that the average age at death steadily fell from sixty-two years and a fraction in the habitually temperate class to fifty-two and a fraction in the decidedly intemperate; whilst it came as a surprise that the average age at death of total abstainers was fifty-one years and a fraction, but this was fully accounted for by the fact that total abstainers were, as a rule, younger people, and their average age would therefore necessarily be less than that of the community in general. The incidence of particular forms of disease in the several classes was next considered. Cirrhosis of the liver and gout were markedly prevalent in the higher alcoholic classes—that is, in those who consumed most alcohol; so also was chronic renal disease. But this latter was found to be due, not to the direct action of alcoholic liquors on the kidney, but to the intermediate effect of the gout which the alcohol had produced. The consumption of alcoholic liquors appeared to check malignant disease; but with tubercle the incidence varied: in the young it was found in the more temperate or lower alcoholic classes; in middle age it was found equally in the upper and lower alcoholic grades; whilst in the old it caused death chiefly in the higher alcoholic classes. So far as the statistics went, they showed that alcohol had no influence in inducing apoplexy. The same applied to diabetes, bronchitis, pneumonia, and enteric fever, habits of alcoholism having apparently no effect in raising the mortality of these diseases. Throughout the report the words alcoholic liquors had been used instead of alcohol, for it was well known that different diseases were induced by different forms of stimulant. For instance, gout was rare in a whisky country, whereas it was common in a beer country. Similarly, he thought it should not be too hastily assumed that the effects of all forms of alcoholic liquor were the same in producing the rarer diseases, such as those of the nervous system.

Dr. BERNARD O'CONNOR inquired into the *modus operandi* of the irritation caused by alcohol. Referring to the fact that different lesions were produced by different varieties of alcoholic liquors, he said that amongst hop-pickers in Kent delirium tremens was common, and they were beer-drinkers. He felt sure that gout was produced by substances in beer other than alcohol. For the ultimate explanation one must look in the direction of chemistry, and perhaps alcohol, like carbonic oxide, acted by depriving hæmoglobin of the power of carrying oxygen.

Dr. PEARSON said that the liver being the organ which most directly dealt with alcohol, it was found in practice first and most largely affected by it. The lungs and kidneys were not so much heard of in regard to alcoholism, being more rarely affected by it, and, when affected, to a less extent. This was probably to be accounted for by their office as excretory organs, and by the fact that in the lungs the alcohol met with dilution in the form of watery vapour and in the kidney by more direct dilution. The coats of the stomach were probably the only tissues which could be proved to suffer by the direct toxic effect of alcohol. The changes produced from alcoholism were life changes or nutritive changes, and affected first interstitial tissue. A proportion of the alcohol imbibed was directly secreted by the lungs. Predisposing causes, such as constitutional weakness or exposure to cold, directed in certain cases the expenditure of a portion of the force of the alcoholic degeneration upon the lung tissues. Previous disease or local weakness of structure determined the seat of lesion. Portions of lung, probably lobular, had their interstitial tissue affected by degenerative change, which in its first stage had been looked upon as of a fibroid nature. In its later stages this change would probably show more the nature of the changes associated with senile decay. As the lung substance underwent change, the bronchial tubes threw off their epithelium at their terminal ends, probably to a morbid extent. They lost their elasticity and their secretion was imperfectly disposed of. It collected, degenerated in character, and, as the disease proceeded, required more and more effort for expulsion. The expulsive efforts meant the convulsive upheaval of a more or less inert mass, containing in it dilated, because inelastic, bronchial tubes; these were no sooner emptied than they again gradually filled with muco-purulent fluid. When this fluid reached the level of the healthy tissue, and probably when innervation became sufficiently active—say after a night's rest—the expulsion period began, and might last from one to three hours, varying with the extent of the tissue involved. In typical examples the characteristic convulsive cough ended in a supreme effort of sickness, and the inelastic bronchi were emptied. After the successful effort to empty the bronchi peace was attained much more perfectly than in ordinary chronic bronchitis, till the next period of filling reached its emptying level once more, or till the nerve force was set in motion for the effort of expulsion. These views had been much elucidated by Sir Andrew Clark's reading of the case he saw after exploration, and received confirmation from an earlier case, proved by post-mortem examination to differ from an ordinary case of bronchiectasis. As distinguished from the stimulant expectorant treatment for ordinary bronchitis, the treatment in these cases after regimen and attention to general health was best carried out by a course of hydrochloric acid and nux vomica, antiseptic inhalations, and counter-irritation as by capsicum ointment.

Dr. PAYNE, in reply, thought the Society might be congratulated upon the issue of the discussion, in having elicited a considerable number of valuable observations on the morbid changes produced by alcoholism, and as having brought out in a definite form the views held by different members as to their causation. With regard to certain points, we had not received so much information as he had hoped. He referred especially to the condition of the tongue, of the gastric and intestinal membrane, and of the skin. Nor with regard to the effect of alcohol on the kidneys had the discussion brought to light any new facts. The interest of the subject remained concentrated, as it was before, chiefly on two points—the effect of alcoholism on the liver and on the nervous system. Personally he had to thank those members of the Society who had discussed the subject for the manner in which they had referred to his opening remarks, and for the criticisms which his views had met with. With regard to the liver, the views which he ventured to suggest as to the causation of cirrhosis had not met with much acceptance. Dr. Lionel Beale, indeed, developed a conception of the process very different from that commonly adopted, regarding it as essentially an atrophy, and denying, or at least questioning, any new formation of fibrous tissue. The preponderance of fibrous tissue in certain parts was

then explained merely by the absence of liver cells. With this he confessed he could not altogether agree, since the evidence of new formation of fibrous tissue seemed to him in many cases indisputable. The point at issue seemed to be rather this: Was the undoubted degeneration and destruction of hepatic tissue to be explained as always a consequence of the fibrous hyperplasia? were the two changes not often concurrent? or might not the degeneration of liver cells precede, in some cases, the increase of connective tissue? The chief argument against the two latter explanations was that supplied by specimens such as those shown by Dr. Sharkey, in which apparently healthy liver tissue was seen side by side with masses of new formed connective tissue, even in advanced cases of cirrhosis. In answer to this undoubtedly strong argument, he would urge, first, that sections mounted in Canada balsam did not always show the actual condition of the liver-cells so well as when the cells are examined in the fresh state, since the fat especially and also other materials were removed by the processes employed in mounting. He could not himself recall any instance of ordinary alcoholic cirrhosis in which the residual masses of liver tissue had not been yellow and opaque from the presence of fat and granular matter in the cells, instead of presenting the normal liver colour. This change, indeed, was so universal that it has given the process its name of cirrhosis, or yellow disease. Secondly, it must be admitted that there were groups of liver-cells, and also bile-ducts, which showed what were considered to be the signs of health and active life in possessing distinct nuclei deeply stained by the colouring agents. But these characters were, he thought, seen in a minority of instances; and, arguing from the naked-eye appearances, one would doubt whether they prevailed over a large part of the liver. Moreover, he could not help suspecting that many of these brilliantly nucleated liver-cells might be of new formation, showing a process of repair in the liver tissue. When a destructive process continued for a long time in a large organ such as the liver, there was every opportunity for restoration of tissue, and the clinical facts of recovery, at least temporary or partial, from cirrhosis, made such a restoration extremely probable. Further, the new formation of bile-ducts was a pretty well established occurrence in hypertrophic or biliary cirrhosis, and, as was shown by Dr. Saundby[1] and by others, it might also occur in alcoholic cirrhosis. One of the specimens which he exhibited at a previous meeting showed the same phenomenon, and he believed it to have been alcoholic cirrhosis, though he had not the complete history. If there might be a new formation of bile-ducts, it seemed but a short step to new formation of liver-cells, though these, appearing as normal elements of the organ, would not be generally described as new products. This topic would, however, require more elaborate working out than was possible that night. He would, however, suggest that the question of repair and restoration of epithelical glandular structures, such as liver-cells, was one which would well repay further inquiry. Another ground on which he hesitated to accept the view that atrophy and destruction of hepatic tissue was consecutive to and caused by fibrous hyperplasia was that the cirrhotic liver was not necessarily, as was sometimes assumed, an anæmic organ. It was, of course, obvious that there was a deficient supply of portal blood; but, on the other hand, the supply of blood through the hepatic artery was very copious. This was shown very clearly when the organ was injected after death through the latter vessel. The injection entered easily, and filled the interlobular capillaries very completely; so that, as far as we could see, it was not the anæmia due solely to vascular compression by contracting fibrous tissue which starved and destroyed the hepatic cells. In fact, as stated by Rindfleisch, there was a continual extension of the territory of the ramifications of the hepatic artery. He did not, of course, deny that ultimately the new-formed fibrous tissue underwent contraction, as was usual with such tissue, like a scar, and compressed the organ generally; but he submitted that this was not the only or the primary cause of the morbid changes which occurred in the secreting tissue. It might seem, after all, as if there were something wanting fully to explain the remarkable development of fibrous tissue in this disease, appearing, as it did, out of proportion to the intensity of the local irritation. He would suggest, anticipating a later part of the subject, that something here was due to the simultaneous action of alcohol on the nerve centres, by which, through the vasomotor nerves of the hepatic artery, was produced an active hyperæmia of the liver. It was thus that the inflammation was sustained and the hyperplasia was, so to speak, fed. He would not dwell upon the morbid changes in the brain, which had been so ably discussed by Dr. Savage, and of which some valuable statistics were contributed by Dr. Pitt. He was glad to find that his tentative suggestions as to the causation of general paralysis had been confirmed by Dr. Savage's authority. Dr. Pitt's observations on the production of meningitis, cerebral and spinal, were very interesting. Some years ago he showed to the Society a specimen of acute cerebro-spinal meningitis, corresponding precisely to the descriptions given of the epidemic form of that disease, in which the occasioning cause seemed to be excessive drinking, accelerated, possibly, by other circumstances.[2] With respect to alcoholic paralysis, which had lately received so much attention, there seemed to be a general consensus among all observers that the main morbid change was peripheral neuritis, and that changes in the spinal cord, if present, as they were in one of Dr. Sharkey's cases, were comparatively rare and exceptional. He might, however, have drawn attention to the valuable paper by Dr. Handfield Jones, published in the *Practitioner* for December, 1881, some months before Dr. Wilks's observations on "Paralysis due to Alcohol." In one of his cases undoubted softening of certain parts of the spinal cord was detected by Dr. Lockhart Clarke. Under neuritis we had examples of both the changes to which he directed attention—namely, a parenchymatous degeneration of the nerve fibres, and interstitial inflammation of the fibrous structures of nerves, sometimes combined, sometimes met with singly. Although it was impossible to say which of these changes was the primary one, it would seem on the whole probable, as remarked by Dr. Finlay, that the degeneration was the earlier, and the interstitial inflammation the secondary change. His view of the actual causation of these changes in the nerves had been criticised by Dr. Buzzard, whose authority in matters of nervous disease required that his remarks should be seriously weighed and considered. And he might first repair an omission in his opening remarks by referring to Dr. Buzzard's own important observations on alcoholic neuritis in his lectures on Peripheral Neuritis. Dr. Buzzard did not think that these changes in the nerves could be due to the direct action of alcohol upon them. He contended that the morbid changes were confined almost entirely to the peripheral terminations of nerves; while the spinal cord, nerve roots, plexuses, and proximal portions of the nerve trunks had been found, as a rule, perfectly free from such changes. As regarded the spinal cord and nerve roots this was, as he had said, universally admitted; but, as regarded nerve trunks and plexuses, he could not agree. In speaking of peripheral nerves, he meant to speak of nerves as a whole, not of their peripheral extremities, and as a matter of fact, numerous specimens were shown at the last meeting of changes in the large nerve trunks, such as the popliteal, and in internal nerves, as the pneumogastric and phrenic. Moreover, he was able to show a specimen which was still more conclusive of alcoholic neuritis of the sacral plexus. It was a section made in the pathological laboratory at St. Thomas's, of a specimen sent him by Dr. Crooke of Birmingham, who had unfortunately not been able to be present at the meetings. So far from the recorded observations referring chiefly to terminations of nerves, he had been able to find hardly any records of the changes in the cutaneous terminations of nerves, which might be an interesting subject. Why alcohol should affect the brain and the nerves more than the spinal cord we did not know. But surely such an irregular incidence on different parts of the body was the rule in the action of toxic substances generally, both as regarded their functional and their structual effects. Morphia, strychnia, or curare circulating in the blood would each select a different portion of the nervous system for its specific functional action. And the same was the case with tissue-poisons, such as lead and the diphtheritic virus, each of which had, as its special seat of election, a certain part of the nervous system. The same law might, he believed, be established in going through the whole series of toxic nerve inflammations. Doubtless the ultimate explanation of these variations must be some difference in the chemical composition of the several nerve tissues, if we did but know what their chemical composition was.

[1] Path. Soc. Trans., vol. xxx., p. 301.

[2] Ibid., vol. xxi., p. 71

Dr. Buzzard's own view was that the changes in the nerves were secondary to alterations produced by alcohol in the vaso-motor centres of the bulb and cord, which, by causing either contraction or dilatation of the minute arteries, led to anæmia or hyperæmia respectively in different parts of the body, the consequences of the diminution or excess of blood-supply being, in the one case, degeneration of nerve fibres; in the other case, inflammation. In discussing this hypothesis, we must consider the two cases of vascular constriction and vascular dilatation separately. As to the first, he confessed he found it difficult to attach much importance to this cause. All our knowledge of the action of alcohol on the nerve centres went to show that it never acted as a vessel constrictor, as was shown by, among other facts, the lowering of arterial blood-pressure which it produced. It could hardly be admitted, therefore, that it could set up so extreme a degree of anæmia as to result in degeneration of tissues. It was true that the action of alcohol on capillaries and small vessels, when directly applied to them, was constrictive, as we saw in its styptic effects. But such a mode of action would be local, not remote, and, if it occurred, would show that the alcohol was actually on the spot and capable of acting directly on the tissues; so that this could not be what Dr. Buzzard meant. Vascular dilatation, on the other hand, was a well ascertained result of the functional action of alcohol on the nerve centres, having for its consequence active hyperæmia of external, and possibly of internal, parts of the body. Such hyperæmia, if persistent or frequent, would be undoubtedly, as Dr. Buzzard contended, a predisposing cause of inflammation, putting the tissues into such a state that they were easily affected by any injury. Hence the proclivity of alcoholics to certain forms of inflammation, bronchitis, pneumonia, certain skin affections, and so forth. (But it was noticeable that, according to Dr. Lauder Brunton, alcoholic intoxication destroyed the sensibility of the vaso-motor centre to reflex impressions, so that certain injuries produced less effects than in health, and reflex hyperæmia, which was probably a frequent source of disease, would not here come into play.) He had suggested that this kind of hyperæmia might also have some share in the causation of cirrhosis of the liver. But the question was whether it would have any special tendency to produce inflammation of nerves. One serious objection to this hypothesis was that the long nerves, such as the pneumogastric and the phrenic, or the chief nerve trunks of the limbs, passed through several vascular territories, the supply of which was not controlled by any one set of vaso-motor nerves. Take, for instance, the sacral plexus and the plantar nerve of the foot, supplied by very different sets of bloodvessels. Another objection was that in that part of the surface upon which alcoholic hyperæmia was most marked—namely, the face and head—alcoholic neuritis was rare or almost unknown. Finally, the analogy of the other forms of neuritis produced by various toxic substances, such as lead, arsenic, copper, or by specific diseases, in which the histological characters were the same as those of alcoholic neuritis, though the vascular disturbances were wanting, supplied a strong argument in favour of the toxic action of alcohol. These agents also exerted the twofold action which he had attributed to alcohol—namely, of producing parenchymatous degeneration and interstitial inflammation. He would refer as another instance to the action of lead salts on the kidney, the first result of which was epithelial degeneration; the secondary and ultimate change, interstitial nephritis. On the whole, he submitted that the general result of the facts adduced was in favour of what he might call the toxic theory of the action of alcohol on tissues. Regarding the symptoms of alcoholic paralysis as due to injury of nerves, he would just draw attention to a certain sequence of the morbid phenomena, in which alcoholic changes and those produced by other poisons were alike. In the case of muscle nerves, the afferent or sensory fibres seemed more easily affected than the motor fibres. Hence loss of muscular sense, producing ataxia, characterised the slighter cases of alcoholic nerve disease. Now, a similar ataxic condition had been observed in the neuritis of brass-workers (Suckling), and in diabetic neuritis. The symptoms of slight diphtheritic nerve-poisoning (in which the knee-jerk was lost) were of the same kind. In all these diseases, if the action were more intense the motor fibres were affected, and paralysis resulted. Cutaneous nerves might be considered as analogous to muscle nerves, but as having a large afferent or sensory element, and a comparatively small efferent element, which was partly motor in its function, partly trophic. The sensory fibres were affected first, and in slighter degrees of neuritis, their lesion giving rise to the sensory symptoms already referred to. Where the injury was more severe, the efferent fibres were affected, the result being trophic changes in the skin, such as had been referred to by Dr. Hadden and others. Dr. Buzzard's remarks on the meaning of the word neuritis and similar names of diseases were interesting, and it was satisfactory to find that Professor Kontos confirmed what, he believed, had been the generally received explanation of their etymology. It was, at all events, that given in Liddell and Scott's Lexicon as the etymology of pleuritis and some similar words. But there could be no doubt that these words were now technical terms used in the special sense of inflammation, and most of them, like neuritis itself, had been coined in modern times for this purpose; so that it seemed doubtful whether we could press their strict etymological sense as a guide to their use. But to discuss this point at greater length would, perhaps, lead us too far from our main subject. With regard to the very important question as to the connexion of tubercle with alcoholism, he thought it would be generally agreed that all recent contributions to the subject led to show that this connexion was a real one; at least, as regarded pulmonary tuberculosis. This disease was present in most fatal cases of alcoholic paralysis, and in a proportion of cases of cirrhosis of the liver too large to be accidental. Dr. Sharkey's ingenious suggestion that a lesion of the vagus nerve might, by lowering the nutrition of the lung, predispose it to be the nidus of the bacillus tuberculosis, deserved to be remembered. He would add that impairment of the function of the vagus would also lead to inadequate removal of mucus from the bronchioles and air cells. At all events, the inaccurate impression that habits of alcoholic excess were in any way antagonistic to tubercular disease must be regarded as swept away. He would not attempt to refer to all the topics which had been adduced. But when the facts and arguments which various members had brought forward as their share of the discussion came to be printed in a permanent form, they would be acknowledged to form an important contribution to our knowledge of the subject. The general outcome of the discussion seemed to be that structural, as distinguished from functional, disturbances due to the excessive use of alcohol had more importance than had been generally assigned to them; that the action of alcohol had, at all events, more resemblance to the action of mineral poisons than we had been accustomed to think. The corollary which he would venture to draw on his own responsibility was that these injurious effects were produced in a preponderating degree, or one might say almost entirely, by concentrated forms of alcoholic drinks. The practical conclusion, if he was right, would be that the harmfulness of an injurious quantity of alcohol was in almost direct proportion to the degree of concentration in which it was ingested. But for these conclusions he must not make the Pathological Society responsible.

Sir JAMES PAGET congratulated the members on the course of the discussion; it had been a most temperate debate on the results of intemperance. It had been clearly shown that hard drinking undoubtedly produced serious organic changes, and he could not help contrasting the caution of the speakers, who were most competent observers, in adducing their conclusions, with the positive and dogmatic statements continually made elsewhere by those possessing but little real knowledge of the subject.

The following card specimens were shown:—

Mr. LENNOX BROWNE: Congenital Growth of Larynx.

Mr. DUNN: Synostosis of Cervical Vertebræ.

Mr. SYDNEY JONES: (1) Chylous Fluid from Hydrocele; (2) Nasal Calculus.

Dr. MONEY: Atrophy and Sclerosis of Brain.

Microscopical specimens:—

Dr. PEARSON: Kidney, Lung, and Liver, from a case of alcoholism.

Dr. PAYNE (for Dr. Crooke): Sacral Plexus, showing changes in chronic alcoholism.

The general meeting was then proceeded with, and the appended list of officers elected for the ensuing year:—President: W. H. Dickinson, M.D. Vice-Presidents: James Andrew, M.D.; J. Hughlings Jackson, M.D., F.R.S.; J. F. Payne, M.D.; H. G. Sutton, M.B.; Richard Barwell; Marcus Beck, M.S.; F. Howard Marsh; Henry Morris, M.B.

Treasurer: William Cayley, M.D. Honorary Secretaries: Samuel West, M.D.; Rickman J. Godlee, M.S. Council: C. E. Beevor, M.B.; Sidney Coupland, M.D.; H. Radcliffe Crocker, M.D.; William Ewart, M.B.; Percy Kidd, M.D.; E. Emanuel Klein, M.D., F.R.S.; Stephen Mackenzie, M.D.; J. Arderne Ormerod, M.D.; George Thin, M.D.; W. Hale White, M.D.; William Anderson; H. Trentham Butlin; Victor Horsley, B.S., F.R.S.; Jonathan Hutchinson, jun.; G. H. Makins; Herbert W. Page, M.C.; Bernard Pitts, M.B.; A. Quarry Silcock, M.D.; J. Bland Sutton; Frederick Treves.

The usual votes of thanks to retiring officers closed the proceedings.

Sir JAMES PAGET, in reply to a hearty vote thanking him for the able and efficient manner in which he had presided over the Society's meetings during his term of office, said, in a few well chosen words, that any work he had done for the Society had been well rewarded by their election of him as President late in life. He was glad to embrace that opportunity of explaining why for some time he had delayed joining the Society. He, with others, had made the profound mistake of imagining that the effect of establishing a new society would be to detract from the value of the older Royal Medical and Chirurgical Society, but the excellent work that had been done by both since proved this apprehension to be ill-founded.

CLINICAL SOCIETY OF LONDON.

Laryngeal Cancer.

THE annual general meeting of this Society was held on the 11th inst., Dr. W. H. Broadbent, F.R.C.P., President, in the chair. The following papers were read on laryngeal cancer.

Dr. NEWMAN read a case of Auto-inoculation in Laryngeal Carcinoma, and two cases illustrating the danger of Intra-laryngeal Interference in Cancer of the Larynx. In the first case, the patient, J. K——, aged forty-nine, applied on account of hoarseness and dysphagia, apparently due to acute laryngitis. This subsided under treatment, after which an elevated ulcer was detected on the left false cord, midway between its anterior and posterior attachments. This presented the characteristic appearances of an ulcerating carcinoma, and covered about a quarter of an inch square. At this time (April, 1887) the mucous membrane of the interior of the larynx was practically normal, but towards the last week of June a localised hyperæmia of the mucous membrane, covering the right false cord, was noticed. This change was limited to a point on which the free surface of the tumour impinged upon the right side of the larynx. An ulcer then developed on the right side, and by December the second ulcer was the larger in size. Both the anterior and posterior portions of the larynx were free from disease. The patient had a severe cardiac affection, with a ventricular systolic murmur, and chronic bronchitis and emphysema. In February, 1888, the patient was re-admitted to the Glasgow Royal Infirmary. The laryngeal disease was practically the same as in December, with the exception that the inflammation was more intense, and several small erosions were observed at the base of the epiglottis. The patient, who had been rapidly emaciating, died at the end of April from pulmonary disease consequent upon fatty metamorphosis of the heart and mitral regurgitation. On removal of the larynx after death, two ulcerating tumours were found to occupy the position of the false cords, and extended forwards towards the commissure, so as almost to meet in the middle line in front. The growths were soft, with deeply-injected floors and thickened edges. The ulcer on the right side was larger and more irregular than that on the left. The mucous membrane was thickened, œdematous, and hyperæmic, and extending up from the base of the epiglottis there was a very irregular but superficial erosion, and several small round erosions on the trachea. These eroded parts presented a striking difference from the ulcerating neoplasm; their edges were sharp and marked by a thin bright red line, while their floors were pale and comparatively smooth. External to the larynx there was no cancerous disease. After a careful search several lymphatic glands were found in the neighbourhood of the larynx, some of which were slightly enlarged, but none were found to be cancerous. Microscopic examination showed the growths to be distinctly carcinomatous. Dr. Newman remarked that this case was of interest in several respects, as an example of auto-inoculation, and in its being a case where death had occurred previous to the disease becoming extra-laryngeal. Here the disease clearly spread from the primary growth to the opposite side of the larynx, by direct contagion rather than, as was usually the case, by continuity of tissue. In the second case the malignant growth was strictly limited to the cavity of the larynx. The patient, who was sixty years of age, came under care three years ago, to have the tumour removed by partial laryngectomy. The growth, which was situated on the left false cord, and about the size of a horse-bean, proved to be an epithelioma. The patient was duly informed of this fact, and urged to have the operation of partial laryngectomy performed at once. But he insisted on waiting for at least a month. Ten days after the intra-laryngeal operation a swelling about the size and form of half a horse-bean was discovered over the left superior cornu of the thyroid cartilage. This ultimately proved to be a carcinomatous lymphatic gland. The third case was that of a female aged fifty, suffering from a tumour on the posterior third of the right vocal cord, about the size of an orange seed. The tumour presented the appearance of an inflamed papilloma; the mucous membrane was deeply injected, and the history of the case favoured the diagnosis of papilloma. The patient had little or no discomfort or pain. There was no lymphatic involvement. Dr. Newman was then led to remove a small fragment of the growth, which presented the microscopic appearances of a papillomatous adenoma without the least suspicion of the structure of an epithelioma. Shortly after this a larger portion was removed. Following the second operation a diffuse swelling appeared in the neck, but in seventeen days this swelling subsided, and revealed two enlarged lymphatic glands, one on either side of the thyroid cartilage. The subsequent course of the case proved them to be carcinomatous in their nature, and the growth within the larynx, which, on examination of the first specimen, was believed to be a papilloma, ultimately, on examination of subsequent specimens, proved to be an epithelioma, and the patient died from the disease.

Dr. FELIX SEMON read a case of Laryngeal Cancer, in which hæmorrhages, perichondritis, and exfoliation of the greater part of the laryngeal cartilages occurred, with subsequent pleuritis and gangrenous pneumonia, resulting in death. The notes of this case were illustrated by macroscopic and microscopic specimens. The patient was an official of the Cape Government, aged fifty-two, whose illness began in April, 1886. The first symptom was hoarseness; later on dyspnœa supervened, and in September, 1887, tracheotomy had to be performed. He came under Dr. Semon's observation in January, 1888. At that time the laryngeal appearances were entirely those of perichondritis. But externally, below the tracheotomy tube, there was a soft reddish ulcerating tumour, through which a probe penetrated to the laryngeal cartilages, and which, on microscopic examination of a fragment, was found by Mr. Shattock to be of typical carcinomatous nature. The patient passed the last six months of his life in St. Thomas's Hospital, under the joint care of Sir William Mac Cormac and Dr. Felix Semon. During this time he gradually got worse; hæmorrhages from the tube, which had already previously occurred, became more frequent, and sometimes serious; fragments of gangrenous muscles, later on of cartilages, were expectorated; cancerous granulations which had formed round the tracheotomy wound broke down, formed again, broke down again, &c., leaving the aperture larger and larger each time. The expectoration of cartilaginous fragments continued; on one occasion a large part of the cricoid plate, on another almost one-half of the thyroid cartilage, were expelled; the expectoration became purulent, very profuse, and fetid; pleurisy and pneumonia on the right side set in, and on July 27th, 1888, the patient died exhausted. At the post-mortem examination, it was found that the larynx was changed into an enormous cavity, 6·5 centimetres in length, the walls of which were ulcerated throughout. Of the laryngeal cartilages, only the greater part of the epiglottis, a part of the left half of the cricoid, and the left arytenoid cartilage were found, the rest having been destroyed or eliminated. The trachea was healthy, and there was no perforation of the œsophagus. One gland on the right carotid showed evidence of carcinomatous infection. There was purulent pleurisy on the right side, and the right lung was con-

solidated, and contained numerous gangrenous cavities. Microscopic examination of the affected parts showed the cancerous nature of the laryngeal ulceration. In his remarks on the case, Dr. Semon considered especially: 1. The occurrence of hæmorrhages in laryngeal cancer. 2. The complication of cancer with perichondritis and the elimination of fragments of cartilage. 3. The frequent absence of glandular swellings in these cases. 4. The clinical history of the cancerous vegetations round the tracheotomy wound. 5. The mode of death in laryngeal cancer.

Mr. BUTLIN read the sequel of a case of Epithelioma of the Vocal Cords for which partial excision of the larynx was performed. Recurrence of the growth took place about nine or ten months after the operation of partial excision. Tracheotomy was performed exactly one year after the first operation. The patient survived the operation of tracheotomy one year and two months, when he died slowly of exhaustion.

Mr. BUTLIN also read a paper on two cases of Thyrotomy for the removal of Malignant Disease of the Larynx. In pursuance of an opinion expressed by the author in a previous paper that it was not necessary to remove the cartilaginous or bony framework of the larynx in certain cases of intrinsic carcinoma of the larynx which are suitable for operation, two cases were reported. The first was a case of squamous-celled carcinoma (epithelioma) of the larynx in a woman twenty-seven years of age. The thyroid cartilage was divided in November, 1887, and the disease was cut and scraped out. She made a good recovery, and was well a year later and free from every sign of cancer. The second was a case of the same disease in a man fifty-one years old. A similar operation was performed in 1888. The man recovered without hindrance, and was well in September. The author pointedly drew attention to the comparatively trivial nature of the operation in cases of malignant disease of the larynx of limited extent. In another instance in which he performed an exploratory thyrotomy in a man advanced in years, and found the disease too extensive for removal, he closed the wound, and the man recovered and left the hospital, wearing a tracheotomy tube.

Dr. DE HAVILLAND HALL related the history of some cases to prove the difficulty of diagnosis of the nature of laryngeal cancer. In one case of hoarseness in a gentleman examined for life insurance the signs were simply those of chronic catarrh. Later on abscesses developed in the right aryepiglottic fold. Tracheotomy was advised but objected to, and the patient died suddenly two years after his life had been accepted by the insurance office. Microscopic examinations were made, and the disease found to be malignant, though the death certificate gave chronic laryngitis as the cause of death. In a second case the diagnosis was malignant disease, because of the existence of a fungating mass in the interior of the larynx. Tracheotomy was performed, but exhaustion led to death in two months. The researches of Dr. Hebb proved that the disease did not contain carcinomatous elements. Perichondritis was in practice either of syphilitic, malignant, or phthisical origin, but the fact of improvement by the use of iodides did not prove the syphilitic nature of it. He considered that the cases reported by Mr. Butlin were arguments in favour of resorting to early opening of the thyroid.

Dr. SEMON reported a case of a well-known German deputy, who at seventy years of age was found to have a papilloma of the anterior commissure of the vocal cords. Removal and recurrence took place on more than one occasion. It seemed to be nothing more than a wart, but the microscope proved it to be carcinomatous. It was removed again, and an enlarged gland appeared; this was extirpated and found to be carcinomatous. Yet the patient remained alive and well. In the *British Medical Journal* of June last he published another interesting case of a clergyman, who remained well and did his work. The case of a well-known magistrate on whom Hahn had operated, on Dr. Semon's advice, was also referred to as an instance of successful removal of new growth by external operation.

Mr. KEETLEY mentioned a case of chronic laryngeal disease in a man aged sixty. Perichondritis and necrosis of cartilages occurred. Thyrotomy was performed, and most but not all of the disease was scraped away, but the disease rapidly recurred, and death took place some months later. At the time of operating there were no signs of enlargement of the glands.

Mr. BUTLIN remarked that some curious impressions had been made upon the public and upon the profession with respect to the relative value of the operations for the removal of cancer, and it was desirable that they, as surgeons, should define as clearly as possible their position in regard to questions of diagnosis and treatment.

The following are the officers appointed:—President: Mr. Christopher Heath. Vice-Presidents: Drs. W. Howship Dickinson, R. Douglas Powell, and C. Theodore Williams; Mr. J. Warrington Haward, Sir William MacCormac, and Mr. Alfred Willett. Treasurer: Dr. William Miller Ord. Council: Drs. Thomas Churton, J. Kingston Fowler, A. E. Temple Longhurst, Stephen Mackenzie, T. J. Maclagan, Angel Money, Isambard Owen, F. Charlewood Turner, Samuel West, and W. Hale White; Messrs. T. Colcott Fox, W. H. Bennett, Henry Trentham Butlin, Rickman John Godlee, Cuthbert Hilton Golding-Bird, H. Ambrose Lediard, W. Appleton Meredith, C. W. Mansell Moullin, F. Shirley Murphy, and Charters J. Symonds. Honorary Secretaries: Dr. Thomas Barlow and Mr. R. W. Parker.

MEDICAL SOCIETY OF LONDON.

Inguinal Colotomy.—Distribution of Rickets, Acute and Subacute Rheumatism, Chorea, Cancer, and Urinary Calculus in the British Islands.

AN ordinary meeting of this Society was held on the 14th inst., Mr. Edmund Owen, Vice-President, in the chair.

Mr. HERBERT ALLINGHAM read a paper entitled "An Important Supplement to the Operation of Inguinal Colotomy." He had observed that after several of his cases of inguinal colotomy the patients had suffered from a distressing procidentia of the intestine through the inguinal opening. He had at first imagined that this had arisen from too large an incision in the groin; acting on this, he diminished the length of the wound, but the results failed to verify this hypothesis. At length he came to the conclusion that procidentia occurred only when the sigmoid mesentery was of considerable length. By the aid of diagrams he showed how a lengthy mesentery would allow of procidentia occurring at each action of the bowels. To prevent this he devised the following method of operating in cases where the condition of the mesentery was as above described. He pulled out through the wound all of the intestine that would possibly come forth. These portions he allowed to rest upon the abdomen, and then sutured. From twelve hours to three days afterwards he entirely removed all these pieces or bunches of intestine, first of all applying a clamp about an inch from the wound to prevent the intestine slipping. Experience taught him that the clamp must be spiked, and must possess a firm and tenacious grip, otherwise severe hæmorrhage might ensue. The clamp should be allowed to remain on for twelve hours; indeed, so long as any slackening of it produced bleeding. A necropsy at St. George's Hospital on a patient who died some months after undergoing inguinal colotomy had furnished the requisite confirmation of his theory, there being no mesentery and no procidentia. He admitted that this further procedure, by increased danger of hæmorrhage, aggravated the seriousness of the operation, but to his mind to allow procidentia to occur or to continue, practically nullified the good effects of inguinal colotomy. In all cases, therefore, of innocent stricture or growth, where the patients were likely to live for some time, he would draw out, make tense, clamp, and remove the intestine. In bad cases of malignant disease he would not carry out this operation. He had treated five cases by the method above described, and he related these in detail to the Society. The chief points in the operation were—1. The fact that pain occurred when cutting through the mesentery, but not when dealing with the intestine proper. In the former case the use of ether was necessary. 2. The supreme importance of using a spiked clamp that would under no circumstances slip or relax its hold; its correct use would prevent serious hæmorrhage, the only thing really to be feared. 3. The great length and weight of the portions of intestine removed. Specimens were shown varying in length from four to twelve inches, and in weight from three ounces and a half to six ounces. He advocated the adoption of his method in lumbar colotomy where procidentia also occurred.—Mr. EDMUND OWEN failed to see how the slack mesentery could be brought into the wound in lumbar colotomy when the peritoneum was not usually opened.—Mr. G. R. TURNER had operated by the inguinal method three times, two being cases of malignant disease and one a child with imperforate anus. None of these had had

prolapse.—Mr. JESSETT, after operating by Mr. Allingham's method, had had great prolapse of gut, and the lower part was not well cut off; in three cases the pain and inconvenience were as great as before the operation. The reasons for not adopting this new modification were the risk to the patient, the great chances of peritonitis, and the performance of what was practically a second operation. He described a method he had devised which secured a more extensive coaptation of peritoneum.—Mr. S. BENTON said that in the cases he had done he had not found a long sigmoid mesentery. The incision should be as small as possible, and the intestine encouraged to adhere well all round the wound.—Mr. LOCKWOOD found, as the result of many measurements, that a number of sigmoids had no mesentery at all, and that the length of the sigmoid colon varied from eight to forty inches. In newborn children it was frequently found on the right side. It should be remembered that the mesentery might stretch, and so a secondary prolapse result.—Mr. PITTS inquired if the application of the clamp caused sickness.—Mr. ALLINGHAM, in reply, said that in four cases out of ten of lumbar colotomy the peritoneum was opened, and the intestine, if necessary, could therefore be drawn out. He had found two cases in a hundred with no mesentery to the sigmoid, but in these he could have pulled the gut up and fastened it to the abdominal wall. In only one case in a hundred did the sigmoid lay on the right side. The clamp was applied three days after the operation, and left on for twelve hours. In one case he had to remove it at the end of six hours on account of sickness.

Dr. ISAMBARD OWEN exhibited the maps forming the report of the Collective Investigation Committee upon the Geographical Distribution of Rickets, Acute and Subacute Rheumatism, Chorea, Cancer, and Urinary Calculus in the British Islands. This inquiry, projected by the International Committee appointed at Copenhagen for collective research, had been carried out in this country by the Collective Investigation Committee of the British Medical Association, with the help of Professor Humphry. An inquiry paper had been sent to every qualified practitioner in the three kingdoms asking a question as to the prevalence or non-prevalence of these five diseases in each contributor's district. Upwards of 3000 replies had been received, and the reports had been tabulated and transferred in colour to five series of maps—one for each disease. Places in which the disease was reported common were coloured in red, places in which it was reported uncommon appeared in blue, while doubtful cases were tinted purple. Dr. Owen observed that the results of such an inquiry must be construed only in a broad and general sense, and not too much stress laid on points of detail. Having drawn attention to the varying distribution of the colours in the different series of maps, he summed up the results as follows:—1. That there was no district in the British Isles in which acute and subacute rheumatism and malignant disease were not common in the sense defined in the inquiry paper. Of varying degrees of prevalence above that point this inquiry was not designed to furnish a criterion. 2. That rickets, though not unknown in rural districts, was mainly a disease of towns and industrial regions, and especially of large industrial towns; that it was rare in the rural districts of Scotland, the north of England, North Wales, and Ireland, Ulster excepted; that it was more common in the rural districts of Ulster and of the rest of England, and exceptionally prevalent in Cornwall, Kent, and North Essex. 3. That chorea, like rickets, was mainly a disease of towns and industrial regions, though by no means unknown in rural districts; that it was fairly evenly distributed in the rural districts of the four countries; that it was rare in seaside watering-places; and that it was, by exception, somewhat rare in the south as well as the west of London, and not, generally speaking, common in Glasgow, even in the poorer quarters. 4. That the distribution of chorea was further affected by that of acute and subacute rheumatism, its prevalence diminishing as the latter disease became rare. 5. That urinary calculus exhibited a decided tendency to affect the eastern coasts of the two islands; that its chief seat in South Britain was the county of Norfolk, from which it radiated into the neighbouring counties, and in North Britain the angle of land above Aberdeen, from which it extended down the east coast to the Forth; that it showed a less decided tendency to appear in the coalfields, being especially prevalent in the Black Country; and that its prevalence did not otherwise seem due to geological conditions. No claim was made to have exhausted, or even to have done more than open up, the difficult subject of the geographical distribution of these diseases. The inquiry, as originally designed, was but the first stage in a series. Might we hope to see the work carried further? It was a task which one body alone in this country, he might say almost in Europe—the British Medical Association—was in a position to undertake; it was a task among those which the founders of the Association intended it to execute. It was not an unimportant task, or one devoid of serious practical objects. Geographical distribution was the basis of sound etiology, and on sound etiology the success of preventive medicine depended. But if the work was to proceed further, it must be localised, and carried on, piece by piece, through the individual effort of the branches.—Mr. JESSETT said that he read a paper some time ago on the distribution of cancer, basing his calculations on the Registrar-General's returns. He remarked on its prevalence in the fen districts, land which laid low and was damp, apparently favouring its occurrence.—Dr. BRAILEY alluded to the fact that when the pure water from Loch Katrine was brought into Glasgow, the increase of rickets was very marked.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.

AT the meeting on the 7th ult., Dr. Spottiswoode Cameron, President, in the chair, a paper was read on "The Pathological Affinities of Lead and Alcohol," by Mr. NORMAN PORRITT, who ascribed the prevalence of lead poisoning in Huddersfield to the character of the water supply. He then compared the actions of lead and alcoholism, dividing their actions, for convenience, into two groups, an excretory and a nervous group. The action of lead and alcohol is essentially paralytic, and there is not only nervous and muscular paralysis but metabolic and excretory paralysis. Alluding to the elective action of alcohol and lead, he thought that alcoholic consumption would explain elective action in a certain number of cases, and we ought not to be content with ascribing to elective action all cases of lead poisoning. Mr. Porritt concluded by giving an analysis of twenty-two cases of plumbism, fourteen males and eight females. Of the latter, only those over sixty years of age had severe or serious symptoms. Of the males, five only had gross nervous symptoms, and in all these there was a history of indulgence in beer.

Mr. WILLIAM HALL spoke of the difficulty of finding the source of the lead. He recommended searching the floor of the cistern, which, even if of slate, might have the joints luted with red lead.

Mr. OAKLEY thought the general proportion of men to women in plumbism was not that shown by Mr. Porritt's cases. Men took an early cup of tea made from water which had stood in the leaden pipes all night.

Dr. SWANN spoke to the effect of plumbism on the embryonic tissues, and related three cases of sterility or pregnant miscarriages where, after the source of the water contamination had been removed, healthy pregnancy speedily supervened. There was generally a large quantity of uric acid in the urine in these cases. He had known some very severe cases of plumbism in total abstainers, while drunkards similarly exposed escaped.

Dr. CHURTON compared the effects of lead and alcohol in the production of peripheral neuritis, and related a case where the wife was suffering from plumbism and the husband from alcohol. In another case, a child a few months old was the first to suffer, being seized with colic, for which no adequate cause could be found, which proved fatal. Then the rest of the family began to suffer. The cistern here had been mended with red lead. With regard to recovering lead from the urine, in one case it was recovered by electrolysis in the form of a lead tree daily for twelve days. Then after administration of iodide of potassium for another period; but the iodide was best given intermittently. He thought that abstainers, as a rule, suffered most.

Mr. G. CARTER related three cases, in one of which the lead had been administered in the form of pil. plumbi c. opio for severe hæmatemesis from gastric ulcer. This case, a pregnant woman, who suffered severely with ulcerated blue patches on the gums, offensive breath, and colic, recovered without aborting.

Dr. EDDISON thought the profession hardly realised how widely diffused was the injury due to lead. He thought many cases of disease of indefinite character, with hard pulses, traces of albumen in the urine, and great depression, who improved greatly after absence from home, were really cases of plumbism. In cases where a whole family were exposed to the poison, those who took active exercise, hunting, &c., seemed to suffer least. He had known one case from contamination of milk which was "creamed" in leaden pans, which were vigorously scraped in process of cleansing.

Dr. CAMERON said that, with regard to last year's outbreak at Huddersfield, there were two main theories as to the action of rain following the long drought. One was that sulphuric acid was produced in larger quantities by the action of the water upon the iron pyrites present in the substrata of their collecting ground after a long period during which the acid had not been washed away. The other was that surface or flood water, which otherwise would have been allowed to run to waste, was collected in view of the possibility of a water famine, this flood water containing a large quantity of organic impurities, and consequently having a greater solvent action upon lead. He held the latter view. Might he be allowed to say that the cause of lead poisoning was lead poisoning. What he meant was that acute symptoms often supervened in persons who, having been, as a consequence of their occupation or otherwise, long subject to toxic influences, were suddenly brought under the influence of an increased supply of the poison. He instanced a case where a man had worked in lead, had suffered from plumbism when young, then remained apparently unaffected, and became severely affected six months after the tainted corporation water was supplied to his house. Dr. Cameron then discussed and criticised the various materials which had been suggested as substitutes for leaden water pipes.

Mr. PORRITT, in his reply, stated that in none of his severe cases had the patient ever worked in lead. He thought that his theory as to the effect of alcohol had been strained by the Society a little farther than he intended to push it. Indeed, he thought, that moderate drinking might possibly be in some cases protective by stimulating the metabolic and eliminative functions. It was only in heavier drinkers, the soakers and the drunkards, where these functions were seriously impaired, that the effects of alcohol were marked. He thought the vulnerability of pregnant women probably depended partly upon the increased amount of effete material to be got rid of, and partly upon the impaired power of excretion.

Mr. MAYO ROBSON showed the following specimens:—1. A Perforating Ulcer of the Stomach. The perforation was the size of a shilling, and situated on the anterior wall, there being also two large deep ulcers on the posterior wall. The patient, a girl aged fourteen, was apparently well at breakfast-time, and was suddenly seized with pain, vomiting, and collapse an hour afterwards. The abdomen was opened on the third day. Odourless fluid, like barley-water, but no gas, escaped from the wound. The patient's condition was very urgent, so the abdomen was simply washed out with boracic solution and a Bantock's tube inserted, this being under the circumstances thought more promising than gastrorrhaphy. Death occurred on the following day. 2. Lymphatic Angioma, removed from the axilla of a woman aged twenty-one. It was about the size of an orange, and had been growing for several years.

Several other specimens were also shown by various members of the Society.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on December 6th, Dr. J. W. Martin, President, in the chair.

Reports.—The Pathological Committee presented reports on Dr. Hargreaves' specimen of sarcoma of breast, Mr. Lyth's cancer of cæcum, and Mr. Favell's bony foreign body removed from side of knee. They reported that the latter had a bony nucleus, and was surrounded by a cartilaginous matrix with bony centres interspersed. They thought it was a cancellous exostosis which had become detached.

Miners' Nystagmus.—Mr. W. MAKEIG JONES introduced a man aged thirty-seven, who, with the exception of a few months twelve years ago, although working in a mine, had never worked as a collier. He also mentioned three other cases which got better, whilst working with open lights. He likewise called attention to the contraction of the orbicularis, and the peculiar carriage of the head met with in these cases.—Mr. SNELL thought the case differed from the form commonly met with in miners. In his experience it occurred solely in men whose work necessitated the head being placed on one side, and giving an obliquely upward direction to the eyes. Change of the kind of pit work alone sufficed in some cases to effect a cure.

Spontaneous Reduction of Dislocation of Shoulder.—Mr. JONES also related the particulars of this case, which occurred in a man. Reduction took place on removing a sling from the forearm.

Rupture of Aortic Valve.—Mr. LYTH showed the heart from a man aged fifty-nine, who had died suddenly from syncope whilst standing and attempting to micturate, on the fourth day of treatment for an old stricture of the urethra. He described the post-mortem condition. The kidneys were congested, but otherwise normal; the left side of the heart was much hypertrophied and the mitral valve thickened. There was an old perforation of one of the aortic valves about one-eighth of an inch in diameter; all three were thickened. Nothing else was discovered to account for death.

Aneurysm of Aorta.—Dr. SIDNEY ROBERTS exhibited a patient aged thirty-six years, suffering from aneurysm of the transverse portion of the aortic arch, which pointed in the third left intercostal space near the nipple line, producing pressure upon the left pulmonary artery and alteration in the left carotid and radial pulses, but no other internal pressure signs. The man had syphilis fourteen years ago, and was subject to strain. The swelling was first noticed in August, 1887.

Perichondritis.—Mr. PYE-SMITH showed a larynx affected with perichondritis. Elisha R——, a mason aged forty-eight, had had hoarseness for six months and attacks of dyspnœa for four days. On laryngoscopic examination, there was great swelling of the right ary-epiglottic fold, the cornicula laryngis being pushed to the left. Tracheotomy was performed, and in a fortnight the swelling had so much subsided that the tube was removed. The wound healed and the patient breathed well for three or four weeks, when dyspnœa returned. Dropsy, with albuminuria, now appeared. Tracheotomy was again performed, but was rendered difficult by the scar tissue and the depth of the trachea (two inches and a quarter from the surface) rendering a specially long tube necessary. The dropsy and nephritis continued, bronchitis followed, then right pleurisy, and finally pericarditis, proving fatal on the eighteenth day after the second operation. At the necropsy, three ulcers were found in the larynx, one above and two below the right cord, all communicating with a cavity which lay bare part of the external surface of the ossified cricoid cartilage. There was no history of syphilis. The kidneys, pericardium, and right pleura were inflamed.

A Contribution to the Morbid Anatomy of the Scarlatinal Kidney.—Dr. C. H. WILLEY read this paper, and remarked that he had been fortunate in securing specimens which formed series exhibiting progressive stages of tissue change from the fourth to the fortieth day, and also because one fatal on the eighteenth day showed considerable inflammatory action, without being associated with albuminuria. He thought that it had been too much taken for granted that in scarlet fever convalescence nephritis is closely indicated by albuminuria, and conversely that the presence of albumen meant nephritis. Both were wrong, especially the latter. The usual way of demonstrating what is called scarlatinal kidney had not been by investigating all kidneys, whether associated with albuminuria or not, but to narrow the view to a specimen of undoubted nephritis. It had been isolated from its clinical surroundings and treated purely from a pathological standpoint. He showed microscopic specimens from cases fatal on the fourth, eleventh, and eighteenth days, all associated with albuminuria; also from a case fatal on the fortieth day of undoubted nephritis Albumen had existed for thirty days. The first sign of the interstitial affection appeared by small cell infiltration of the fine connective tissue in connexion with vascular structures in the cortex, the afferent arterioles, and Malpighian bodies. Specimens from the case fatal on the eighteenth day showed changes more active and advanced, with addition of thickening of the walls of the arterioles, due, he thought, to the swelling of the middle coat, but, according to Greenfield,

thickening of the intima. Specimens from the case fatal on the fortieth day showed changes described by Klein and Greenfield as glomerular nephritis; but, in addition, the fine connective tissue among the capillary bundles of the glomerular tuft had also proliferated and split the tuft into sections, each of which was destroyed by the subsequent contraction of the new tissue. Dr. Willey believed that the majority of cases of albuminuria after scarlet fever were not associated with an actual inflammation of kidney—i.e., that albuminuria did not necessarily show that the kidney is the seat of mischief. Glomerular nephritis is a rare and fatal disease, and it is only one form of organic kidney disease accompanying scarlet fever.

MIDLAND MEDICAL SOCIETY.

A MEETING was held on Dec. 12th, 1888, Mr. Hugh Ker, F.R.C.S. Edin., President, in the chair.

Ankylosis of Hip; Osteotomy.—Mr. BARLING showed a case of osteotomy for faulty ankylosis of hip. The patient, a boy, suffered from hip-joint disease seven years ago, the result being bony ankylosis of the hip, with the femur at an angle of about 60 degrees with the body. The neck of the bone, though greatly thickened, appeared to be hardly at all shortened, so the division was made through it by means of an osteotome. No difficulty was found in this, as the bone was fairly soft, and subsequently the tensor fasciæ femoris was divided before the femur could be brought down almost to complete extension. There was no constitutional disturbance afterwards, and the limb was firmly ankylosed in the new position in six weeks. There is now one inch and a quarter shortening, and the limb is still somewhat flexed, but the patient's condition is very much improved, as he can walk about comfortably without the aid of a stick, whereas he used generally to have the support of crutches.

Carcinoma of Pancreas.—Dr. SUCKLING read notes and showed specimens from a case of carcinoma of the pancreas, diagnosed during life. A man, aged thirty-three, a labourer, was admitted into the workhouse infirmary on June 25th, 1888, complaining of backache. This was relieved by a belladonna plaster, and the patient was discharged on July 2nd. On the 19th he was readmitted, with deep jaundice; the gall-bladder could be distinctly felt, and a hypodermic needle was passed into it, a syringeful of dark-coloured bile being withdrawn. Shortly afterwards the patient complained of severe pain in the region of the gall bladder, and was very faint, these symptoms passing off in a few hours. The stools were ash-coloured, but not apparently oily. The urine contained sugar, its specific gravity being only 1022, and throughout the illness there were none of the ordinary symptoms complained of in diabetes. The jaundice gradually deepened until the patient was of a dark-green colour, especially in the face. He rapidly emaciated, in two months losing a stone in weight. Pain was a prominent symptom throughout, morphia being freely administered; it was felt especially in the back, but also all across the upper part of the abdomen. The liver was small throughout, and no tumour could be at any time felt, though there was decidedly more resistance over the upper portion of the right rectus muscle than elsewhere. Dr. Suckling emphasised the diagnostic features of the case—namely (1) the presence of deep persistent jaundice, with distension of the gall bladder; (2) presence of sugar in the urine; (3) the absence of any enlargement of the liver; (4) the progressive emaciation and rapid course of the disease, death occurring within five months of the onset of the pain in the back. The carcinomatous growth implicated the head of the pancreas only; the pancreatic duct was dilated, and contained a large calculus. There were no secondary growths. Throughout the case there were no dyspeptic symptoms and no vomiting, the duodenum not being at all obstructed. The severe pain was probably due to the existence of the calculus. Another interesting feature in the case was that the patient's mother and sister suffered from diabetes.

Pseudo-hypertrophic Paralysis in a Woman.—Dr. SUCKLING showed a woman, aged thirty-seven, suffering from pseudo-hypertrophic paralysis. She had been under his care three years, and during that time no alteration in condition had occurred. There was no family history of this or any other nervous complaint. She noticed weakness in her back thirteen years ago, this gradually extending to the arms and legs, and being the only complaint. She had also noticed enlargement of the limbs. The gait was waddling, and she could easily be upset. In the erect position there was very marked lordosis. She rose from the ground and from the sitting position in the manner characteristic of the complaint. The calf muscles were much enlarged and rigid; the buttock muscles and the forearms were also much enlarged, all the limbs being apparently well developed. There was great weakness, the patient not being able to hold the upper extremity horizontally for more than a few seconds. The knee jerk was lost on both sides.

Removal of Shaft of Fibula. — Mr. AUGUSTUS CLAY exhibited a boy aged ten, from whom he had removed the whole of the shaft of the fibula on the left side, and upon whom he had performed amputation through the condyles of the femur on the right side. Six of the patient's sisters died young, either from croup or bronchitis; he himself had always been delicate and underfed. Three weeks before admission he was attacked with high fever and grave constitutional disturbance, and complained of pains in his legs, and "could not bear the bedclothes to touch him." There was no history of injury, nor was there any wound. When admitted, he was fearfully emaciated and had bed-sores. Profusely discharging sinuses were seen in the neighbourhood of the knee and ankle joints on either side, and the lower epiphysis of the right tibia and fibula were entirely separated, and the ankle joint opened. On the left side the diaphysis of the fibula was quite separate from its epiphyses, which were quite healthy. The lower epiphysis of the right fibula contained a mass of necrotic caries. Both shafts of the tibia and fibula presented the usual signs of acute necrosis. The fibular wound healed primarily, except where drainage-tubes were inserted, and three months later there was distinct thickening as though the bone would be reproduced from the periosteum and the epiphysis which remained.

Mr. JORDAN LLOYD showed a Uric Acid Calculus successfully removed from the kidney of a young man.

Mr. TAYLOR read a paper on the relation of Dress to certain Diseases of Women.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on Friday, Nov. 16th, Dr. H. Handford, president, in the chair.

Fæces passed by the Urethra.—Mr. HATHERLY read, for Mr. Thompson, notes of three cases. The treatment was palliative, and each of the patients died. Necropsies were not allowed. One of the cases was undoubtedly malignant.

Hypertrophical conditions of the Cervix Uteri.—Mr. HATHERLY then read a paper on this subject. He first dealt with the conical cervix, which he believed to be generally congenital. The diagnosis of the condition was very simple, and when, as sometimes happened, it was mistaken for procidentia or prolapsus, it could only be through a careless or incomplete examination. The only remedy was amputation. Mr. Hatherly described the different methods of performing the operation, but preferred the most simple procedure of immediate removal with wire rope écraseur. If the operation was performed slowly, and with a rather thick wire, hæmorrhage would be very unimportant. He had not found stenosis or dysmenorrhœa to result in any instance from amputation by this method. Mr. Hatherly also exhibited a specimen of Follicular Hypertrophy, in which the whole cervix had become so much enlarged as to plug the vagina and prevent sexual intercourse. After amputation the patient made a speedy recovery, and had suffered no subsequent inconvenience.

Peripheral Neuritis.—Mr. T. D. PEYCE read a paper on this subject. Having discussed some of the most common types of multiple neuritis, he drew especial attention to diabetic neuritis, and considered that this might occur in two fairly distinct varieties: 1. One in which the motor fibres of the peripheral nerves were chiefly affected, with consequent paralysis, more or less marked in degree. This form had been observed in a late stage of the disease. 2. One in which the sensory, vaso-motor, and trophic nerve fibres were chiefly implicated, and in which the symptoms present resembled very closely those of locomotor ataxy. This form of diabetic neuritis he ventured to call diabetic ataxia, or diabetic pseudo-tabes. Its symptoms presented a great

similarity to those of alcoholic ataxia, as described by Dreschfeld.[1] In support of this view Mr. Pryce related three cases (published in THE LANCET, July, 1887-88) which presented sensory vaso-motor and trophic symptoms, and in which there was no muscular paralysis or wasting. In one of these cases extensive peripheral neuritis was found after death. He further alluded to the comparatively frequent occurrence of neuralgias of a symmetrical type in diabetes, and considered this fact to be suggestive of an especial tendency on the part of the diabetic poison to affect the sensory nerve fibres. Mr. Pryce also drew attention to a suggestion made by him some two years ago as to the nature of the ataxia of diabetes. He believed it to be due in many cases to a peripheral sensory neuritis. A case of peripheral neuritis associated with old-standing phthisis was also related. The patient was a woman aged fifty-seven, and presented the usual sensory and motor symptoms of neuritis—i.e., pains of various characters, anæsthesia, tenderness of muscles to pressure, muscular paresis, and atrophy, with altered electrical reaction, and loss of knee jerks and impairment of superficial reflexes. There was no history of alcohol, syphilis, or rheumatism in this case. Peripheral neuritis was found after death. The paper was illustrated by drawings, photographs, and microscopic specimens of alcoholic, diabetic, and idiopathic neuritis.

Mr. W. WINDLEY showed a specimen of Calcareous Degeneration of the Valves of the Heart. The aortic valves were most affected, being in some places half a centimetre in thickness. The aortic and other vascular walls were free from disease.

Dr. F. R. MUTCH exhibited the Uterus and Fallopian Tubes removed after death, and illustrating the Rupture of a Tubal Pregnancy at an early stage (probably the eighth week). The case was remarkable on account of the early date of the rupture.

Dr. H. HANDFORD showed drawings and microscopic specimens of Alcoholic Neuritis.

Dr. G. ELDER exhibited card specimens of Ovaries, showing Chronic Ovaritis from a single woman, aged thirty-four, the subject of Dysmenorrhœa.

Mr. T. W. KELLY introduced the following specimens:—(1) A Foot, the seat of Chronic Thickening and Gangrene, removed from a woman aged twenty-nine, the subject of old-standing Infantile Paralysis; (2) Uterine Fibroid.

Reviews and Notices of Books.

Lectures on Ectopic Pregnancy and Pelvic Hæmatocele. By LAWSON TAIT, F.R.C.S. Leicester: Richardson and Co. 1888.

A COMMUNICATION on the subject of extra-uterine pregnancy and pelvic hæmatocele from so able a surgeon as Mr. Lawson Tait is sure to be read widely and with interest. It contains much that is suggestive, much that is fanciful, and not a little that is hardly in accordance with fact. Its style is characteristic, and is rich in vehement denunciations.

The author refers from time to time to his theory of the physiology of impregnation, and especially to the function of the ciliated epithelium of the Fallopian tubes, which is briefly as follows:—The uterus is the proper place for the meeting of sperm cell and germ cell; but spermatozoa try to get further—namely, into the Fallopian tubes, which are normally protected by the cilia of the epithelium. If this epithelium is absent, the spermatozoa can then penetrate the tube and produce tubal gestation. This theory appears to us to have little to commend it.

The author describes a mode of rupture in cases of tubal gestation which takes place downwards between the layers of the broad ligament, the ovum being then in some cases developed further in this situation, so as to become entirely subperitoneal (the "sous-péritonéo-pelvienne" variety of Dezeimeris), and which in his opinion yields "all the cases which go on to the period of viability." This opinion is, however, directly contrary to the evidence of two cases which he quotes—those of Jessop and Champneys,—in which the living fœtus was seen to have developed free among the intestines. The subperitoneal variety has recently been proved by frozen sections of a case described by Hart and Carter, and quoted at length, and therefore does occur. Mr. Tait describes a case which occurred in 1881, in which Mr. Hallwright advised operation after rupture of a tubal gestation, but on which he declined to operate. The patient died, and it was found after death that operation might have saved her. This operation he subsequently performed with success in thirty-eight out of thirty-nine cases. We would remark that the details of these cases should have been given in this paper, the evidence of tubal gestation being often obscure, and the proof of its existence difficult. The table appended does not contain these details, and we have therefore no independent means of judging of the value of the above statements.

The question of hæmatocele is discussed at length, and the opinion given that intra-peritoneal hæmatoceles are almost always fatal, and that they are always due to tubal pregnancy. That they are far more dangerous than the subperitoneal variety may be granted, but we imagine that most observers of large experience have seen not a few cases in which patients have recovered from the intra-peritoneal variety, and not a few in which there was no evidence of tubal fœtation, besides many on record.

Mr. Tait says (page 31): "I have seen nearly eighty cases of intra-peritoneal hæmatocele, all resulting in death save those (with two exceptions) in which abdominal section was performed for the purpose of obviating death." These cases should have found a place in the present memoir, with sufficient details to enable readers to judge of the statement. The same remark applies to the following (p. 33): "I cannot form any exact estimate of how many cases of these operative hæmatoceles I have seen, but it is certainly not less than fifty, and is more likely to be seventy or eighty." This is a vague statement, and carries less conviction to the reader than an accurate record of a much smaller number.

The author condemns (in our opinion rightly) the treatment of tubal gestation by puncture or electrolysis. Puncture is very dangerous, and very uncertain; and in most cases, if not all, where success is claimed for electrolysis the diagnosis is very doubtful.

On page 54 we read: "Peritonitis rarely occurs in these cases [of intra-peritoneal hæmorrhage], and the talk there about the collections of blood becoming encysted by inflammatory process is the merest nonsense. The encystment is brought about by the distension of the broad ligament, by the effusion of blood into its cavity, and of course exists from the first. Parry quotes a case from Matthews Duncan, in which the latter authority gives his facts so clearly as to admit of no doubt as to what had happened, but without in the least understanding them." This sentence we reproduce without comment.

On page 67 Mr. Tait repeats the obsolete phrase "the placental sound." This inaccuracy should not occur, carefully observed cases of extra-uterine gestation furnishing one of the most convincing proofs that the "placental sound" is not placental.

On page 71 he recommends the "careful tending" of a child to the viable age before operation. Evidence seems to us to point in an entirely opposite direction. We believe that every day an extra-uterine gestation (once fairly diagnosed) is allowed to continue exposes the patient to grave, unnecessary, and constantly increasing risks, not only from rupture, but from growth of the placenta, and that the life of the child in so grave a crisis ought not for an instant to be allowed to prejudice that of the mother.

[1] Brain, vol. vii.

The child's life, if ever so carefully tended, is worth very little purchase, and a large proportion of extra-uterine children are deformed, ill-shapen, and of low viability. Such cases should be operated on at once.

On page 78 the author discusses the "primary" operation—that is, the operation performed during the life of the child—and Parry's belief that it was the puerperal state produced by the termination of pregnancy that was the chief cause of the danger of the operation. There can be no doubt that the main cause of the danger is the still active placenta. Mr. Tait believes that with a "skilful operator" the puerperal woman has no special cause for fear. "My own experience in the Cæsarean operation in the modern methods of amputating a pregnant uterus convinces me that this is so. I never succeeded in getting a woman through a Cæsarean section, and I concluded that it was the puerperal influence. But I know now that this conclusion was nonsense. As soon as I began to amputate the uterus all my patients recovered, and recovered easily, just as ovariotomies recover. I used to do the Cæsarean section merely to save the child; now I amputate the pregnant uterus to save both mother and child; and therefore I begin to look upon a man who does craniotomy as a person worthy of suspicion." This is really a remarkable sentence.

On page 81 Dr. Herman's critical and valuable paper on Delivery by the Vagina is dismissed with the contemptuous remark, "This kind of research is really of little value, for when the details of the case come to be perused it is evident that there are so many points of discrepancy that it is the merest nonsense to argue from such a collection to any general, still more to any particular, conclusion." A similar sentiment occurs on page 98, with regard to a paper by Dr. Champneys on Primary Laparotomy. With regard to the case related in the latter paper, and quoted by Mr. Tait from the Obstetrical Transactions, we would point out that the living fœtus, of nearly seven months, was absolutely free among the intestines (to this point we have already alluded). Again, Mr. Tait implies that the fatal result was due to allowing the cord to hang out of the wound, furnishing a channel by which the placenta was infected, whereas the report states that the temperature was normal for several weeks after the removal of the fœtus, and that after death the cord was firmly united in its whole length. The infection had obviously spread from the intestine to the placenta by a process which has been frequently observed. Mr. Tait endorses the treatment recommended for the future by the author.

Mr. Tait is known to be an able and daring surgeon, but the numerous quotations given above show him to be as daring at least with his pen as with his knife. The book bears marks of haste, arbitrary disregard of even the facts which he quotes, and statements for which no evidence is given, in such proportions as to greatly detract from the value of his conclusions. In our opinion, the progress of science, and of surgery also, depends more upon a judicial consideration of the knowledge at our disposal from time to time, and upon careful and sceptical observation (which our author seems to despise), than on bold guesses, without the patience to test their truth.

OUR LIBRARY TABLE.

A Text-book of Elementary Biology. By R. J. HARVEY GIBSON, M.A., Lecturer on Botany in Victoria University, Liverpool. With 192 Illustration. Pp. 362. London: Longmans. 1889.—The author of this work has written it in the hope that it will fill a gap he believes to exist in English biological literature, the absence of any text-book in the English language dealing with the relationship of botany to zoology, and of both to the fundamental sciences of physics and chemistry. He accordingly commences with a brief account of Matter and Energy, which, though short, is well given. The other chapters deal with Protoplasm, Individual and Tribal Life, the Protista and Protophyta, the Metaphyta and Metazoa, and there is a brief history of Biology. The descriptions of the different plants and animals are good and clear, and the illustrations, for the most part from well-known sources, are exceedingly good. Here and there are omissions which might be supplied in a future edition—as, for example, the lymphatics, of which not a word is said. The book is a good introduction to biology for schools.

Section Cutting and Staining. By WALTER S. COLMAN, M.B. Lond. Pp. 107. London: H. K. Lewis. 1888.—This work is intended as a practical guide to the student, and gives in short compass the apparatus required for histological research, the methods of section cutting, of staining and of mounting specimens, and an account of the preparation of individual tissues and organs. It is not, as the author frankly admits, exhaustive; for example, it gives no account of the creasote-shellac method of mounting, but the descriptions of the several forms of microtome and of mounting media are very good, and the student may safely follow the descriptions given.

The World's Inhabitants; or, Mankind, Animals, and Plants. Being a popular Account of the Races and Nations of Mankind, past and present, and the Animals and Plants of the great Continents and principal Islands. With about 900 Illustrations. By G. T. BETTANY, M.A., B.Sc., F.L.S., formerly Foundation and Shuttleworth Scholar of Gonville and Caius College, Cambridge. London and New York: Ward, Lock, and Co.—This handsome volume is divided into five books, treating respectively of the human occupants, the fauna and flora, of the five great divisions of the globe. The plan of description combines the racial, political, and geographical features of the different lands and their inhabitants. The style is popular, with enough of science to make the contents of the volume instructive without being deterrent to young readers, for whom especially, though by no means solely, the work appears to be intended. There is in the book a large amount of interesting and valuable information—of a kind, too, the possession of which is much to be desiderated in the present day for all classes of the community. A "knowledge of the world," in the widest sense of the phrase, has become more than ever a necessity, and the publication of the volume under notice will go very far to render this acquisition of easy attainment.

Sell's Dictionary of the World's Press.—The ninth consecutive annual volume has now made its appearance, and its lists of newspapers have been brought closely up to date. Amongst the special articles is one dealing with the English medical press and medical journalism. Another article is devoted to a description of Mr. H. M. Stanley, "Journalist, Explorer, and Politician-Philanthropist" (with portrait). The Dictionary is not only invaluable to editors, publishers, and business men, but is also of interest to the general reader on account of its illustrations and articles. The latter, of which there are a large number, cover such varied subjects as "Practical Hints on the Law relating to Libels in Newspapers"; "Pressmen and Printers"; and "Modern Printing Appliances (with illustrations of twenty different machines)." There are also over sixty well-executed photographic portraits of leading London and provincial editors, &c. In so comprehensive a compilation as a "Dictionary of the World's Press" it can hardly be expected that an error should not occasionally occur. Thus, in an article alluding to the circulation of THE LANCET, the writer refers to it in a way which suggests that it is not larger than the amount actually represented by its foreign and colonial edition alone. We merely allude to this ridiculous statement in a passing remark,

especially as the case is fully met by the following quotation which appears upon the same page of the Dictionary: "When it is remembered that the total number of medical practitioners in the Medical Directory is 28,110, and that there are over 22,000 medical men upon our English Medical Register at the present time, and that many thousands are practising medicine in the United States of America, Canada, our colonies, and, indeed, in all parts of the world in which the English tongue is spoken, it may safely be stated that THE LANCET has, at the most moderate calculation, 50,000 readers."

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting of subscribers to this Fund was held on Tuesday, January 15th, 1889, at 34, Seymour-street, W., the residence of the treasurer. There was a full attendance of subscribers, and Sir James Paget, Bart., President, occupied the chair. The treasurer's financial statement was submitted to the meeting, from which it appeared that £1658 had been received in subscriptions and donations during the year (donations £543, and subscriptions £1115), while returned grants and a portion of the legacies received made the income for the year up to £2022. On the other side, grants had disposed of a sum of £1770; clerical and other expenses had amounted to £101 (under 2½ per cent.); and the year ended with a balance in hand of £151. This balance may be accounted for by the fact that some of the subscriptions are paid by the hon. local secretaries during the last week of the year and after the date of the last meeting. In the annuity department £60 had been received on account of returned annuities from death or other causes; £400 had been received in the form of legacies; and the income from investments amounted to £1413; £1346 had been paid to seventy annuitants and £48 to the special fund for raising medical men's annuities from £20 to £26, or 10s. a week, and £424 invested. The distribution of the annuities is carried out by the chairman of committee, Dr. Jonson, at the least possible expense. The report of the committee noticed that the year just concluded had not been an eventful one in the history of the Fund, the chief incident being the receipt of dividends from the legacy left by Sir Erasmus Wilson, which allowed the committee to elect many new annuitants. There are now seventy annuitants—sixty at £20 a year, nine at £26, and one at £10. The subscriptions and donations have fallen off; not so the applications, which reached the number of 200; 169 of these received relief, and the available funds were £100 less than last year, even with the addition of £122 from the annuity department. The committee, under the circumstances, venture to appeal very strongly to the profession for help to maintain the efficiency of the charity. The principal subscriptions have been — the President, £10 10s.; A. O. A., £100; Bower and Keates Fund, £50; Dr. Frank of Cannes, Dr. Cumberbatch, and Miss Cave Brown, £20; Sir E. Saunders' annual donation of £10 10s.; and several others. Legacies have been received from Miss M. Kellar, £100; Dr. Samuelson, £300; the Rev. J. Lockwood, £100; James Whitehead, £22 10s. Three honorary local secretaries have been appointed—Dr. Greves for Bournemouth, Dr. Webb for Wicksworth, and Mr. Edwin Denton for Leicester. One, the secretary for Hull, Mr. Locking, has died in harness. In the committee the death of Mr. Dennis de Berdt Hovell has occasioned a vacancy, and Dr. John Easton has been appointed in his stead. The chairman, Sir James Paget, in reply to the vote of thanks accorded to him, said that he was glad of this opportunity, the first since his election as President, of thanking the subscribers for the honour they had done him. He had accepted the position with pleasure, and for several reasons; one being that it afforded him gratification to take up the work of his old and valued friend, Sir George Burrows, and that, although it was generally supposed that medical men could not be business-like, he was pleased to take a part in the management of a charity so well administered. The characteristics of this Fund are: no salaries, offices, or rent, only the necessary expenses of a collector and for printing and stationery. Applicants must send a form, authenticated by a subscriber's signature, and accompanied by a letter of recommendation to the secretary for cases, and if the application is considered satisfactory, assistance is given either at once or at the next committee meeting in one sum, or more often in instalments spread over a twelvemonth. Annuitants are chosen by a sub-committee from applicants otherwise eligible who have attained the age of sixty years, and are possessed of little or no income.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

A CONVERSAZIONE in connexion with the above Association was held on the evening of Tuesday, Jan. 15th, in the rooms of the Medical Society of London, Chandos-street, Cavendish-square. Nearly 300 members and guests were present. The latter were received by Dr. R. Fegan, president-elect, in the unavoidable absence of the President (Professor A. Macalister, F.R.S.). Among those present were: Lord Ronald Gower, Sir William Mac Cormac, Director-General Dick, C.B., R.N., Dr. Robert McDonnell, F.R.S. (Dublin), Mr. Erichsen, F.R.S., the President of the Harveian Society (Mr. Sedgwick), Surgeon-General Manifold, Dr. Robert Barnes, Dr. Norman Kerr, Deputy Inspector-General MacClinton, R.N., the Hon. Secretaries (Drs. J. Stewart, Clifton, and P. S. Abraham), as well as a large number of prominent members of the profession and their friends, including ladies.

The programme was a departure from the formalities by which conversaziones are so frequently marked. Every variety of taste was provided for and admirable arrangements made, so that the first requisite for such a reunion should be secured—namely, opportunities for conversation—without interruption either of the renewal of old friendships or the enjoyment of those desirous of listening to the vocalists, &c. Art was well represented by the works of the distinguished Irish sculptor, Mr. Bruce Joy, and the paintings of Mr. H. Thaddeus and another Irishman, Mr. D. Joy; by the beautiful pictures of Irish scenes, from the pencil of Miss Inglis; by Mr. Mac Cullum's landscapes; and by paintings of other well-known artists, which covered the walls of the various reception rooms and passages, not to speak of the picture of the Old Irish House of Commons and some very interesting old engravings of Hippocrates, Galen, &c. We looked in vain, however, for the portraits of either Graves, or Stokes, or Corrigan, or Crampton, or Robert Smith, or any of the other men of world-wide reputation whose names will ever be associated with Irish Medicine and Surgery.

Microscopes, scientific apparatus, surgical instruments, photographic and electrical appliances were exhibited by Messrs. Robinson and Sons of Dublin, Messrs. Mayer and Meltzer, Mr. Coxeter, Messrs. Picard and Curry, Messrs. Corbyn, Messrs. Baker, and Messrs. Allen and Hanburys.

The feature of the evening was the excellence of the vocal music which consisted for the most part of Irish melodies or part songs from the collection of the "Dublin Strollers," rendered by Irish vocalists well known in London salons, such as Miss Rose Hervey and Mr. O'Shaughnessy, together with Miss Aungier, Mr. Reginald Groome, Mr. Franklin Clive, besides several amateurs, among whom were some of the members themselves of the Association, including the Honorary Metropolitan Secretary, Dr. P. S. Abraham. Mr. W. B. Martin acted as conductor. Between some of the songs, recitations were given by Mrs. W. H. Stephens and Miss Elaine Verner.

The conversazione was altogether a great success, and admirably wound up the series of reunions by which the Irish graduates have been celebrating during the last few months the conclusion of their first decade as an Association.

OPEN SPACES.—The Vestry of Islington has agreed to the recommendations of the General Purposes Committee, to purchase a vacant piece of land, about an acre, at the corner of Thornhill-road, Barnsbury, for a public recreation ground, at a cost of £2000, and also to solicit a contribution from the Metropolitan Board of Works towards the cost.

THE LANCET.

LONDON: SATURDAY, JANUARY 19, 1889.

THE subject of hospital finance has come a good deal under discussion just lately, and has elicited some trenchant criticism. This of itself is a hopeful sign, for there is nothing like criticism for sustaining public interest even in a good cause; but the best results are attainable only by a criticism that is both fair and duly primed with facts. It does not seem to us that the recent utterances of the critics on this important topic have been at all uniformly fair and well informed. Of Mr. MICHELLI'S paper, which has recently attracted considerable notice, we have spoken at length in a previous number (see THE LANCET, vol. ii. 1888, p. 1241), and Mr. MICHELLI himself had space in our last impression for a reply. We do not propose to continue that discussion. Suffice it to say that if we felt assured that the effect of what Mr. MICHELLI has said would really be what he himself indicates, and what we have no doubt he desired—namely, "to bring to the minds of a portion of the giving public the necessity of ascertaining which are the economically managed hospitals,"—we should have no desire to complain. That effect is one which, in common with all true well-wishers of the existing hospitals and their poor *protégés* we are anxious to see brought about. But there is a distinct danger in the present state of public information that condemnation which is not specifically and pointedly directed upon a particular institution will be ignorantly applied by the public to all alike. It can hardly be otherwise. The most extraordinary misconceptions prevail, and are fostered by those who might be expected to dispel them. Thus, a recent writer in the *National Review* (December, 1888), in an article on the "Great Hospitals of London," discussing the problem of the annual deficit, and alluding to the statement which has sometimes been made that this amounts to £100,000, points out that the tabular statement which we prepared for our Hospital Sunday Supplement showed a deficiency of only £45,000, and then dismisses the subject with an airy remark to the effect that he "has not the means at hand for deciding whether £100,000 more is required to keep in an efficient condition our medical charities, or whether half that sum is nearer the mark." When a writer who is dealing with the subject as an expert feels at liberty to treat it in this fashion, how is it possible to suppose that the general public will be able to discriminate at all, or to appropriate praise or blame which is issued unlabelled through the press.

But another point in respect of which the responsibility undertaken by those who assume in such matters to guide and form public opinion needs to be clearly indicated, has a direct bearing upon the repetition of vague and unauthenticated estimates of aggregate income and expenditure. That unfortunate figure of £100,000, which has only too often been put forward as affording an index of the financial position of the London hospitals, is liable to become a most misleading quotation. Speaking in very round figures, it may be said that the London hospitals are accustomed to receive from legacies and such-like sources £50,000 in large sums—sums which may properly be treated as capital, and as such invested for the permanent benefit of the institutions to which they accrue. Roughly, again, they expend £50,000 on extensions, buildings, and the creation of other forms of capital, so that if all the accounts were consolidated it would in an ordinary year appear that £50,000 capital had been brought into the whole undertaking, and £50,000 had been laid out in more or less permanent additions to premises and plant, thus meeting waste from depreciation and making additions to the capital invested, which will together total up to £50,000. As a matter of fact, however, the hospital accounts are not presented in one consolidated aggregate; and as a matter of fact the capital brought in is not identical with the capital laid out. One hospital will add to its money investments, another will draw upon them and convert them into buildings; and so it happens that, although, if a sufficient number of years were taken, it would be seen that these two funds were identical—a fact which their equivalence from year to year is sufficient to indicate,—still, the existence of an equivalent accession of capital to Hospital A does not prevent the existence of the deficit on the year's accounts in Hospital B.

We are now in a position to understand what the facts actually are about this annual deficit. The sum of £100,000 is arrived at by leaving out of account incoming capital and bringing to account capital laid out. It is clearly an exaggerated figure, because in some instances, if not in all, the capital laid out is identical with the capital brought in. The facts necessary to be stated in explanation of this figure are indeed so complex, as appears from what we have already said, that for our part we should be glad to see this quotation finally disappear from these discussions.

The figure £50,000 is arrived at by including incoming capital in income and outgoing capital in expenditure. It therefore represents accurately enough the upshot of a single year's finance; but it is apt to be misleading unless it is borne in mind that the £50,000 expended is not lost to the institutions like salaries or other items of current expenditure, but still exists in an available and useful form. The money has been expended, but the proceeds are in hand. As a mere matter of accounts, it would probably be best to separate this capital account entirely from the account of current income and expenditure, and then it would be found that the London hospitals, far from rushing headlong upon ruin by piling up debt at the rate of £100,000 or £50,000 a year, keep their expenditure rigorously within their income, and that the effect of any diminution in public generosity is immediately felt in lessened activity, empty beds, vacant wards, and on every side decreased benefits.

We trust that in future writers on the intricate subject of hospital finance will be content to spend a little pains in mastering and exhibiting to public view the essential facts of the case.

THE present age has a passion for biography, and delights to know every detail of the lives of the great men and women who have adorned it and have been gathered to their rest. Among the indirect results of this fashion in literature is the light which it sheds upon the health enjoyed or the ill-health endured by the possessors of distinguished

genius. On the whole, the picture is not a bright one. The great thinkers and writers would appear to have had more than a moderate share of human ills, and often to have achieved their best work in spite of acute physical suffering or profound mental depression. The life of CARLYLE is one long fierce fight with the demon of dyspepsia. DARWIN was forced, time after time, to suspend those indomitable labours which have changed the face of science and rendered this epoch for ever memorable, in order to recoup his shattered physical energies by rest and change. The life of GEORGE ELIOT is full of the tale of headache and languor, the struggle of a great spirit with the infirmities of a frail body. JOHN STUART MILL is another instance of the union of splendid intellectual power with feeble physique, and among living writers it would be easy to mention many more. Is such a conjunction merely accidental, or due to inheritance, or to some imprudent and abnormal mode of life? These questions are sufficiently interesting to detain us for a while.

It might be argued that the prominence of ill-health in the records of genius is simply the result of the fierce light which biography brings to bear upon every detail, and that the physical suffering of eminent men does not exceed that of the average in amount, but only in the publicity which is accorded to it. It might further be urged that men of genius have, as a rule, both heightened sensibility and remarkable powers of description, and that hence the picture of their physical ills becomes unconsciously exaggerated. There is some force in both arguments. Biliousness, when painted by perhaps the greatest master of pictorial description that ever lived (for such was CARLYLE), is no doubt a very different malady from what it is when described by unimaginative Jones or Robinson. But, allowing some weight to these objections, it would yet appear that genius is often associated with physical weakness, and the explanation must lie with one or other of the two latter theories that have been mentioned. Either the type which confers the inestimable boon of intellectual power is commonly associated with feebleness of physical development, or the mode of life adopted by great writers and thinkers is at fault. The former theory, though accordant with many facts, must not be accepted too hastily, and, if in a measure true, is at least happily subject to very numerous exceptions. The records of our universities show that the senior wrangler and the double first are often able to give a good account of themselves in the cricket field or upon the river. Probably in many cases the physical weakness of the intellectually gifted has been the result less of actual congenital defect than of the habits of precocious study and premature development which are apt to be engendered by notable mental superiority. The clever child may become a nervous or dyspeptic man or woman, not necessarily or of course, but because the unwisdom of parents or teachers forces into premature maturity the powers which might be developed without physical injury by timely check and prudent delay. The first duty of a child is to grow, and if this duty be ignored or in any way infringed Nature is absolutely relentless in inflicting her penalty.

Our third theory has doubtless a wide application, as there seems much reason to fear that the habits of the most distinguished brain-workers are frequently inimical to health. The most frequent fault is probably excessive application to work. The writer or scientific worker, if he devotes himself wholly to his pursuits, is to a large extent free from those interruptions to labour, those jolts and jars which are part of the fate of professional and commercial life, and which, however disagreeable, are probably in the long run a great safeguard to health. A NEWTON, a DARWIN, or a CARLYLE in his study works on hour by hour. The most intense and fatiguing of toils is pursued almost uninterruptedly, food is neglected, and the claims of exercise and sleep are but imperfectly admitted. It would be a miracle if under such circumstances health remained unimpaired. There can be no permanent vigour for brain-workers unless three conditions at least are fairly met. Fresh-air exercise must be regularly taken, food must be carefully selected, and sleep must not be unduly curtailed. As regards exercise, some professional authors make the wise rule of taking at least two hours in the open air daily. This is probably a minimum, and might be prudently exceeded. The form of exercise must be left to the individual taste, but riding has always been a favourite mode with the class whose needs we are discussing. The question of food for brain-workers opens up a wide and somewhat debatable topic, but some rules are clear. The brain-worker must live sparingly rather than luxuriously, he must prefer the lighter classes of food to the heavier, and he must be very prudent in his use of alcohol. Tobacco and tea are apt to be favourites with him, and their immoderate use may require to be guarded against. The brain-worker will do well often to go supperless to bed. It is a nice question whether he needs more or less sleep than other men. It might seem a *primâ-facie* probability that the hard-worked brain would need more than the usual quantum of sleep, but it is undoubted that a large proportion of men of genius have been very light sleepers. This was probably in some cases only their misfortune, but there seems some ground for the notion that more than a moderate indulgence in sleep is unfavourable to successful mental effort.

THERE is at the present moment a somewhat widely spread agitation in Sheffield against the continued use of one of the infectious hospitals in that borough, and this on the ground that the institution acts as a centre of infection, and is, as such, a source of danger to the neighbourhood in which it is placed. The Sheffield Town Council provided themselves with the Winter-street Infectious Hospital in 1880, and, apart from the fact that the site is a restricted one, the buildings have generally been regarded as of admirable construction. The small area on which they stand, and the proximity of dwellings to the ward blocks on three sides of the site, would, however, at this date, when new experience as to these hospitals has been acquired, be regarded as constituting an *a priori* objection to any hospital intended to receive all infectious diseases. The other hospital is the outcome of the late small-pox epidemic. The Winter-street Hospital soon became full, and the Town Council had to choose between an abandonment of the attempt to deal with the epidemic by isolation, and the construction of a new hospital. The result was the erection of a series of very excellent wooden huts in an

exceptionally isolated position on Lodge Moor, and the present contention of a certain number of the inhabitants is that all diseases needing isolation should go to Lodge Moor, the Winter-street Hospital being no longer used. Public meetings have been held in support of these claims, memorials have been signed, and the local papers give considerable prominence to the question. Incidentally we would state that the Winter-street Hospital cost some £27,000, and that, besides other important considerations, a financial question is hence involved in the decision come to. But with this we do not propose to concern ourselves, the sanitary aspect being now alone under review.

Does the Winter-street Hospital "spread fever"? is the question that has been raised in Sheffield, and which the Town Council have had provisionally to decide on. We much regret that the generic term "fever" should have been used, for the hospital has for a number of years served for the isolation of the several forms of continued fever, and in 1887 it was also utilised for the reception of small-pox. The latter disease is believed to have spread to an exceptional extent around the hospital; and when Dr. BARRY'S report on the whole circumstances of the small-pox epidemic is issued, we shall doubtless be able to judge how far this extension was due to hospital influence and how far to other conditions. But, in the meantime, it must be admitted as a general law that the aggregation of small-pox cases in hospitals which lie in the neighbourhood of dwellings does conduce to the diffusion of that disease; and if the complainants had limited themselves to the question of small-pox they would doubtless have had such a case to submit as would at once have secured for them what they asked. Indeed, the exclusion of small-pox from the Winter-street Hospital in the future is practically decided on.

The demand goes, however, beyond this, and it is maintained that "fever" spreads in a similar way, scarlet fever being especially instanced as an example; and it was largely on the allegation that this latter fever diffused itself round the hospital in the same way as small-pox had done that the Town Council were asked to instruct the Hospital Committee to report on the desirability of closing the hospital. During the discussion on the subject, all the available medical evidence on this point was well set out by Mr. ARTHUR JACKSON, who quoted the report of the Royal Commission on Small-pox and Fever Hospitals, and the official report on the Use and Influence of Hospitals for Infectious Diseases, and in the end the motion was rejected. As is well known, nearly all experts have expressed the opinion that there is an absence of any evidence to show that scarlet fever and the ordinary infectious fevers spread from fever hospitals in any way that cannot be controlled by an efficient administration, and the renewed evidence which has just been obtained in Sheffield from a large number of prominent health officers nearly all points in the same direction; Dr. RUSSELL of Glasgow, for example, not only asserting that, according to his experience, scarlet fever does not spread from his large hospital to the neighbourhood around, but that it does not even spread from one pavilion to another of the same hospital. There is, however, a solitary exception to this unanimity of opinion, for Dr. TRIPE, in his answer to the Sheffield inquiry, expresses the belief that this disease has spread to the community living around the Homerton Hospital. We have, on a former occasion, raised some doubt as to the accuracy and value of Dr. TRIPE'S statistics in this respect; and having regard to the general unanimity of opinion received in Sheffield to the effect that no such spread had occurred around other infectious hospitals, and to the evidence on this head which is available in respect of the Winter-street Hospital itself, we cannot but feel that at the present moment the Town Council were justified in the attitude which they adopted.

But whilst holding this view, and whilst fully accepting the evidence published as to other hospitals, including the London Fever Hospital, we feel that our knowledge as to the influence of the aggregation of the infectious sick is extremely rudimentary. Above all, evidence is accumulating to show that the infectious fevers behave very differently as regards, amongst other things, their power for spread in different outbreaks, and it is quite possible that varying phases of what may be termed epidemicity may bring about different results. Diseases which under ordinary circumstances do not spread to any extent within the walls of hospitals appear at times to acquire an exceptional tendency to spread in the immediate vicinity of the sick, and it would be quite premature to assign an absolute limit to the extent to which such diffusion may take place, and to regard it as restricted to the interior of wards. Small-pox itself probably varies very much in its power to diffuse itself aerially around a hospital, and whilst we are quite convinced that a very wide distinction must be drawn between small-pox and scarlet fever in this respect, we feel that the utmost watchfulness is desirable whenever cases of any infectious disease are aggregated together to any large extent, with a view of ascertaining whether under any circumstances their several infections can acquire such stability and potency as will enable them to act harmfully on the populations around.

LAST week the Birmingham Poor-law Infirmary, "the largest institution of its kind in the world," was opened with much rejoicing, and a lunch was given in one of the wards, at which many distinguished guests were present. The speeches which were made throw some light upon the circumstances under which this enormous institution came to be approved by the Local Government Board, and upon the kind of thought which has influenced the arrangement of its administration. Mr. HENLEY, one of the inspectors of the Local Government Board, said "the relations between that Board and the Birmingham guardians had always been of a most cordial character, and the real reason was that each body had followed the old English adage of minding their own business." Now, we had assumed that the duty of the Local Government Board was very much to mind the business of the boards of guardians throughout the country, and to exercise the powers they possess in the interest of the ratepayers and of the poor. But we gather from Mr. HENLEY'S speech that the Local Government Board have a still higher duty than this—viz., the maintenance of cordial relations between themselves and the boards of guardians.

We must regard, therefore, the sanction of the Local Government Board to the erection of a building which is

more than twice as large as the largest infirmary which they themselves say ought to be erected, as one of the sacrifices which must be made in the interest of good feeling; it is to be observed, however, that while the Local Government Board only suffer to the extent of loss of principle, the sacrifice of the poor is that which really occurs when arrangements are made for their treatment in a wholesale fashion.

Dr. SUCKLING'S remarks at the luncheon deserve to be taken note of by the profession in Birmingham. It is reported of him in the local press that he said he "would back some of the nurses of the old infirmary against many of the medical men in the town." Here, then, we have further explanation of the opinion previously expressed by a correspondent to a Birmingham journal, that the highly trained nurses of the Birmingham Infirmary will be able largely to replace the medical staff in the medical care of the patients. Dr. SUCKLING'S statement of the ignorance of his brother practitioners in Birmingham takes us by surprise; but we need not discuss either the justice or the propriety of his observations, which may be left to the judgment of our readers.

We may, however, concern ourselves with the effects upon the inmates of an administration which has self-sufficiency as its guiding principle. We have said before that the visiting staff cannot replace the work of the resident officers; the latter, we contend, should be numerically sufficiently strong to examine and treat all the patients in the infirmary; the place of the visiting physician and surgeon is obviously to deal particularly with the more serious cases. When the clerk to the guardians issued his letter of invitation, it was arranged that there should be two resident assistant medical officers; after the appearance of our article we were informed that these gentlemen were to be aided by two clinical assistants, and now we are told that important branches of medical work are to be undertaken by nurses. We do not know if this is to be regarded as a recognition by the guardians of the accuracy of our contention, but we can still only repeat that, notwithstanding these arrangements, this administration is entirely inadequate for the wants of the many people who, away from their friends and homes, are especially dependent upon medical care. An energetic medical superintendent with a strong staff of assistant medical officers is a necessity; a visiting staff and the employment of clinical clerks is undoubtedly an advantage, but cannot replace the former.

Mr. HENLEY is reported to have expressed his approval of the medical arrangements, and his experience and judgment are referred to in the *Birmingham Daily Post* as beyond question. We share with our contemporary the good opinion which it entertains of that gentleman, but on so purely a medical subject we cannot accept his authority; indeed, the absence of medical thought in the Government inspection of these institutions appears to us so serious an omission that we have now under consideration the desirability of the appointment of a commission to investigate all their circumstances and administration. THE LANCET Commission in former years rendered important services to the poor, but it appears there is still an ample field for more work in this direction.

Annotations.

"Ne quid nimis."

THE ROYAL COLLEGE OF SURGEONS.

AT the meeting of the Council of the College, held on Thursday, the 10th inst., of which we gave last week a brief report, much of importance to the profession was discussed and agreed upon. One of the first subjects under consideration was "THE LANCET Medical Fund," and the Council unanimously agreed that the President of the College for the time being should become one of the Almoners for the Fund. This decision is subject to the approval of the legal adviser of the College, but there does not appear to be any question as to his opinion being a favourable one. The next important business was the consideration of a motion by the senior Vice-President, relating to a work, "The Fatal Illness of Frederick the Noble," published by a Member of the College, Sir Morell Mackenzie, and the Council resolved that a letter be sent to him, expressing their deep regret that he should have allowed himself to publish in such a manner the charges that are therein made against distinguished surgeons who were his colleagues in the case, and stating that in their opinion no provocation can justify the publication of the language employed in it. Twenty-one voted for this motion, two against it, and one member of the Council abstained from voting. The motion of Sir Spencer Wells, which was seconded by Mr. Lund, that the annual meeting of Fellows and Members be abolished was discussed, and a proposal made to defer its consideration until after the next annual meeting in November. This amendment was lost, and also the original motion, fourteen voting against and five for it. Had this motion been carried, the hands of those who are working for what is a very reasonable reform in the constitution of the College would have been unquestionably strengthened, for these annual meetings have afforded the Fellows and Members an opportunity of stating their views, and have acted to some extent as a safety-valve to the Council, who have been wise enough to recognise this fact. As, however, the repeated expressions of opinion made by representative men on behalf of the Associations of Fellows and Members are invariably quietly ignored by the Council, appeal must now be made to higher authority. It was agreed that a conversazione should be held at the College under the auspices of the Council, instead of under the sole control and at the personal expense of the President, as hitherto, and a committee was appointed to give effect to the resolution. We refer to the resolutions of Sir W. MacCormac and Mr. Macnamara elsewhere (p. 135). Another attempt was made to enlist the aid of the Council in procuring for the Members those rights to which they are entitled and which they are determined to obtain. A letter was read from one of the joint secretaries of the Association of Members of the College, requesting the Council to summon a general meeting of the corporation in order to consider the necessary course of Parliamentary action with a view to obtaining certain alterations in the constitution of the College. The Council did not consider it expedient to convene a meeting for such a purpose. This will probably be the final appeal to the Council for their co-operation in a friendly spirit. As they manifest such uncompromising determination to resist the advances made to them, nothing

remains but to bring the subject before Parliament in a manner which will not only compel attention, but ensure success. We feel assured that the efforts of the Fellows and Members, who are only demanding their just rights, will be vigorous and well sustained until the desired end is attained.

ARMY MEDICAL SERVICE.

AT the last quarterly meeting of the Council of the Royal College of Surgeons, it was resolved, on the motion of Mr. Macnamara, "That the President be requested to communicate with the Secretary of State for War in favour of dating the commissions of medical officers who have already entered, or are about to enter, the Army Medical Department from the time of their joining at Netley." This motion has reference to a real and substantial grievance of the army medical officer to which we have repeatedly called attention. (See THE LANCET, Sept. 18th and Dec. 25th, 1886, and Sept. 3rd, 1887.) Prior to 1877 the medical officers of all three branches of the service had their commissions dated from the day on which they joined as surgeons on probation at Netley. By the Army Warrant of 1877 this was altered, and the commissions of military medical officers were henceforth dated from the day on which the course of instruction there was completed. This alteration involved not merely the loss of four months in counting length of service for retirement, but made the army medical officer junior to those of the naval and Indian departments who entered at the same time and by the same examination, during the whole period of his service, or at least until he reached the administrative rank. We confess to some surprise that none of the licensing bodies have ere this taken up the question of the great injustice thus inflicted upon some of their members, for it certainly is a question of far more importance than some of those matters in which they have interested themselves. We hardly expect that the War Department, labouring as it is just now under a morbid desire to cut down expense, apparently even without regard to efficiency, will consent to allow the period of probation to count towards retirement; but it is bound at least to put an end to the injustice of making the army surgeons invariably juniors to those of the same standing in the naval and Indian services. This inferior position, coupled with the increased amount of foreign service which Mr. Stanhope has announced, and the refusal of the Indian authorities to recognise the claims of brigade surgeons, will so handicap the Army Medical Service, that we may soon find it again in the position of being unable to get a sufficient number of qualified candidates to fill vacancies, and consequently become so deteriorated as to render a repetition of the Crimean horrors by no means impossible. We sincerely trust that the Secretary of State will seriously consider, before it is too late, the mischief that may result from this fit of money saving, and that he will exert himself to remove such unjust and depressing conditions as must inevitably impair the efficiency of a hard-worked, meritorious, and important branch of the army.

OPERATIVE SURGERY AT THE FINAL EXAMINATIONS.

AT their last meeting the Council of the Royal College of Surgeons of England came to the important conclusion, on the motion of Sir William MacCormac, that students should present, at their final examination in surgery, a certificate of having performed operations on the dead body, mentioning the number of operations such student had himself performed. This compromise will hardly meet the objections of the General Medical Council to the granting of a licence in surgery to candidates who have not had their skill tested in this practical branch of the subject, and we are very anxious to see how the new departure will work. It will give a great impetus to the practical teaching of operative surgery in the schools, and will necessitate a large supply of subjects, if the certificate is to be anything more than a farce. As we have before pointed out, more subjects will really be required for the teaching than for the mere examining, and we expect that the one will inevitably lead to the other. We presume that the regulation will not be enforced at the earliest until the July examination, for during the winter session, when the dissecting-rooms are in full work, any diminution in their supply would seriously interfere with the teaching and study of anatomy. If the certificate is to be of any real value, and the College continues to decline to examine the student, it may lead to the appointment of inspectors by the College of Surgeons, to report on the various methods adopted by the medical schools to carry out the regulation, and such a new departure would make a novel, and in many ways a questionable, precedent.

SLIGHT AORTIC INSUFFICIENCY.

SOME instructive experiments on artificially induced aortic murmurs were published some months ago by Dr. Timofejew (*Berlin Klin. Woch.*, Nos. 24 and 25, 1888), in which he showed that a very slight aortic insufficiency may exist without producing a diastolic murmur, but that here a distinct accentuation of the second sound can then be heard; he also found that with greater but still slight insufficiency, though a murmur is produced, this can be made to cease by diminution of the blood pressure, either by venesection or by section of the spinal cord. These experimental observations are in full accord with the well-known clinical fact that an aortic bruit is sometimes temporarily much less pronounced than usual, and may even occasionally disappear. An interesting paper has just been published by Professor Carl Dehio, of Dorpat (*St. Petersburg Med. Woch.*, No. 50, 1888), in which he gives the details of a case which illustrates this variability of some aortic bruits very well. The patient was a student who had suffered from syphilis. At times he experienced severe pain in the region of the heart, accompanied by dyspnœa, headache, giddiness, and faintness. He had consulted several physicians, some of whom had detected a murmur, while others had declared there was none. Professor Dehio found at first, while the patient was sitting, merely some accentuation of the second sound, but as soon as he stood up a blowing murmur was audible over the whole of the body of the sternum synchronous with the second sound, and prolonged to the end of the diastole. After a time this became less and less perceptible, and finally vanished, but on the patient moving or working his arms about it reappeared. Tracings taken with a Dudgeon's sphygmograph showed that while the patient was in a recumbent posture, there being no murmur, the pulse, which was beating 80 per minute, was of a normal but weak character, with a slight distension wave and a low blood pressure, the secondary waves being only just perceptible. On standing up, the beats increased to 88 per minute, the bruit becoming then audible, the tracing assumed the character frequently observed in cases of neurotic cardiac palpitation, the pulse wave being higher, but falling rapidly, and the secondary and tertiary waves being well marked. After considerable exertion, when the bruit was louder still, the beats being, however, only 76 per minute, the distension wave was three times as high as when the patient was lying down, and it fell very quickly, being in fact the typical *pulsus celer*. It is seen that the bruit was dependent on the initial blood pressure due to the force of the contraction of the left

ventricle, rather than on the mean intra-arterial pressure, which was probably not increased, since, according to the researches of Riegel and of Wetzel, there is no increase in the mean pressure, where the secondary waves become more pronounced. It is evident from the tracings that whenever the primary wave increased the secondary waves increased also, and thus that while when the patient was in a recumbent posture there was but a gentle backward stream through the defective valves, yet upon a slight amount of exertion the velocity of this stream was greatly increased, and thus became capable of producing a murmur. This difference between a gentle and a rapid stream can be easily illustrated by compressing an india-rubber tube through which water from a cistern is flowing, when the murmur, which can both be heard and felt, is readily found to depend on the velocity of the water. Dr. Dehio remarks that he cannot well have mistaken a murmur of hæmic origin for a slight aortic insufficiency in this case, for the whole history, the dilatation of the heart, the occasional whistling character of the murmur, and the serious subjective sensations of pain and palpitation all point to organic mischief. Again, the insufficiency must, he thinks, be of slight extent, as the dilatation of the left ventricle was but very moderate, and as Duroziez's double bruit was not audible in the femoral arteries.

THE METROPOLITAN ASYLUMS BOARD.

THE managers of the Metropolitan Asylumns Board have had under consideration a letter from Mr. A. Braxton Hicks, the coroner for Surrey, requesting them to receive cases of measles into the institutions under their care. This letter was supported at the meeting by Mrs. Lawrie and Dr. Felce, and has been referred to the General Purposes Committee for consideration and report. The question which has to be decided is not of a very simple nature. There is no infectious disease for which isolation does so little owing to its early infectiousness, and it may well be doubted whether under these circumstances public funds should be expended for so small a return. We are not here discussing the Poor-law aspect of the question. It may be proper to give relief of the nature of hospital accommodation in those cases where the wage earnings of a father are unable to provide what is necessary for children attacked with measles; and we presume the managers must consider the necessities of individuals as well as the interest of the public health. One point ought to be clearly understood: the hospital treatment of measles cannot be undertaken without making a considerable demand on the accommodation at the disposal of the managers. There are nearly 3000 deaths from this disease in London in the course of a year—that is to say, from 1000 to 2000 cases occur in a week, assuming that the cases are equally distributed throughout the year; for many of these no demand would be made for hospital accommodation, but these figures are sufficiently large to show that, if the managers undertook to receive cases of measles, it is probable that further hospitals would have to be provided, for the amount of provision must always be equal to the maximum demand. Evidently the subject wants much consideration before any decision is arrived at, but it may conveniently be discussed now, for the managers have no power at the present time to receive cases of measles, and if they, in conjunction with the Local Government Board, determined thus to extend the sphere of their duties, the necessary power could be obtained from Parliament at the same time that the managers receive legal authorisation to afford accommonation for cases of diphtheria. Before, however, this is done, it would be well worth while for inquiry to be made into the effects of aggregation of cases of measles. At the present time the number of cases of fever discharged and died exceeds the number admitted. Thus during the four weeks ending Thursday, Jan. 10th, there have been 212 admissions, 346 persons discharged recovered, and 57 died, leaving 745 patients in the hospitals, as against 936 at the time of the preceding return. The managers have referred to the General Purposes Committee the consideration of the expediency of closing one or more of the hospitals for fever patients. We sincerely trust, in the event of this being decided upon, that no steps will be taken for the dispersion of the staff. No doubt, convenient opportunity is afforded for the elimination of those whose services have not been of sufficient value to warrant their retention; but it would be false economy to discharge a valued officer or servant, who could usefully take part in the next prevalence of epidemic disease with which the managers will have to deal.

TYPHUS IN HULL.

THE occurrence of a group of cases of fever in Hull has led to some local discussion, the point at issue being whether the attacks were typhus or not. There seem, however, very strong grounds for assuming that true typhus has occurred, and this under conditions of overcrowding and filth that are altogether deplorable. The Hull Sanitary Association have taken the matter up warmly; and, from certain details as to house accommodation that are given, action is unquestionably needed. In connexion with the descriptions referred to, mention is often made of the state of Hull as regards its privy accommodation, and the *Eastern Morning News* quotes a report of Dr. Mason, which was presented to the Town Council in March last, which shows that at that date there were 12,741 privies adjoining houses, 246 within houses, 377 under houses, and 11,503 within six feet of houses. As to this lamentable state of affairs, Dr. Mason quotes the bye-law of the model code issued by the Local Government Board, which requires that no privy shall be built within six feet of a dwelling-house. As a matter of fact, the code of bye-laws goes much further, for it only recognises a form of privy which could not possibly be associated with the nuisance which evidently attaches to some of the Hull privies described. What the Corporation of Hull should first aim at is the abolition of privies causing nuisance, and then they should only allow decent privies to be within six feet of houses.

THE EDUCATION OF IDIOTS AND IMBECILES.

IT is now a matter of common intelligence that a large proportion of the inmates of Asylums for Idiots and Imbeciles are capable of instruction. Not only is this true of ordinary school tasks, of course in a limited degree, but it applies also to the case of trade handicrafts and rational amusements. Shoe-making, tailoring, straw-hat making, weaving, and other occupations have thus been taught and learnt, and the success attained is on the whole encouraging. With material apparently so unpromising to deal with, the temptation to do nothing by way of education must be considerable, the more so since it has proved in the case of a substantial minority of the pupils practically hopeless. The marked success attained in other instances is a monument to the perseverance of those who achieved it. It is also an example of really useful work done by conserving, so to speak, the scraps of the national intellect, and it affords a strong argument in favour of the support of those institutions in which this work is carried on. There lies now before us the report of the Royal Albert Asylum, Lancaster. Within the walls of this building are housed some 533 inmates. Most of these are drawn from the seven northern counties of England, which collectively contribute for their maintenance about £4500 per annum. Of late very costly

improvements connected with building alterations and heating arrangements have laid the institution under a temporary debt, nearly £3000 of which remain to be paid. It has therefore been suggested by the committee that the contributions drawn from so prosperous a part of the country might be considerably increased. Nothing surely could be more reasonable than this suggestion, and we would therefore heartily commend it to the Councils which will shortly be elected for the counties above named.

ABSORPTION OF THE TISSUES OF THE ORAL CAVITY FROM PRESSURE.

THE absorption which occasionally takes places from constant pressure upon the tissues of the mouth was well exemplified by two cases brought forward at the Odontological Society this week by Mr. Hern and Mr. E. Lloyd Williams respectively. In the first case, the patient had been wearing a set of artificial teeth, the upper and lower of which were attached by means of springs. She had not removed these teeth from her mouth for several years, and, as a result, the lower had become buried in the floor of the mouth; also it was so twisted round as nearly to sever the anterior pillar of the fauces. There was found to be complete anæsthesia of the right half of the tongue and corresponding portion of the floor of the mouth, also complete loss of the sense of taste on that side. There was no pressure on the inferior dental nerve, as sensibility was present in the skin over the chin. The plate was removed with considerable difficulty, and caused much hæmorrhage. Some weeks later Mr. Hern observed a whitish cord passing across the gap in the anterior pillar of the fauces; this proved to be the gustatory nerve, and on pinching it with tweezers a tingling sensation was felt in the tip of the tongue. Nine months later sensation had partly returned in the tongue. Mr. Lloyd Williams showed a man who had extracted two loose molars for himself, the sockets of which probably communicated with the antrum. The patient, being annoyed by the cavity, plugged it with gutta percha, gradually increasing the size until a plug was used measuring more than an inch in diameter. The hole, however, was much larger than this, as the patient was in the habit of encircling the gutta percha with a piece of lettuce leaf. The walls of the antrum presented in places foul ulcerated spots, which, however, speedily disappeared when an obturator was placed in the mouth and antiseptic injections were used.

THE CENTENARIAN SEASON.

THE weather of the past few weeks has been especially fatal to persons of advanced age, and, as is usual under such circumstances, we have heard much of the deaths of reputed centenarians. It is improbable that more than a tenth of these cases would stand the test of careful investigation, such as the late Mr. Thoms so industriously undertook concerning the very considerable number of cases that came under his notice. The result of Mr. Thoms' investigations was to divide these reputed cases of centenarianism into three classes: those that were clearly disproved, those that could not be substantiated, and those that were established. It is obvious that investigations having for their object the identification of the date of birth of persons born fifty years before the commencement of civil registration involve much labour, and are attended with doubtful success. Baptismal registers very far from invariably record the date of birth, and, unless the name of the reputed centenarian be somewhat unusual, it is often impossible to identify the baptismal entry with any degree of certainty. The time is now, however, approaching when the civil registers will begin to afford the means for corroborating the claims to centenarianism. In the meantime, however, until another Mr. Thoms be found to undertake the labour of investigation, it will be impossible to speak authoritatively as to the proportion of real centenarians among the number of those whose claims are placed before the public whenever the weather is more than usually fatal to persons of advanced age. The Registrar-General, in his recently issued fiftieth annual report, records the fact that among the deaths registered in England and Wales in 1887 were 60 of reputed centenarians, 13 of whom were men and 47 women; this number showed a decline from those in the two preceding years, which were 63 and 71. The age of 32 of the 62 reputed centenarians in 1887 was stated to be 100 years; in 10 cases the age was reported to be 101 years, in 2 to be 106; while one woman was stated to have reached the age of 107, and another of 109 years. It is worthy of comment that 8 of these reputed centenarians died in London and 8 in the Welsh registration division. It should also be stated that nearly all the claimants to the honour of centenarianism belonged to the humblest ranks of life, in which the difficulty of obtaining precise documentary evidence of age is greatest. It is interesting, however, to find among the recorded centenarians of 1887 the widow of a banker, a retired authoress, the widow of a house proprietor, a proprietor of stocks, the daughter of a solicitor, and the widow of a shipbroker. It may fairly be concluded that, at any rate, one or two of these last-mentioned cases would bear the test of rigid investigation, under which the claims to centenarianism almost invariably break down.

DWELLINGS OF THE POOR.

IN a leading article last week we discussed the uselessness of the powers conferred upon householders by Torrens' and the Nuisance Removal Acts for representation to be made to the London County Council and Secretary of State when local sanitary authorities were in default, and we pointed out that these powers were not exercised. The lever required for putting these Acts in motion was therefore wanting, and hence the neglect of sanitary authorities had been permitted without protest of the kind contemplated by the Legislature. The Mansion House Council on the Dwellings of the Poor has endeavoured, to the best of its ability, to supply this want in London municipal life. By the constitution of committees throughout the metropolis, conditions injurious to health, which had escaped the observation or the control of the sanitary authorities, have been remedied; and in districts where unwillingness to comply with the requirements of the Council has been encountered, the aid of the Secretary of State has been invoked. At the instance of the Government public inquiries have been held which have given a great impetus to sanitary administration in London, and this course of action has tended more than any other circumstance to improve the sanitary condition of the London poor. The Mansion House Council has well justified its existence, and has proved a really useful element in the good government of the metropolis. Under these circumstances we commend to the philanthropic public the appeal which the Lord Mayor has made for subscriptions to enable this Council to maintain its useful work. Notwithstanding the fact that the operations of this body are mainly conducted by the voluntary efforts of ladies and gentlemen interested in the welfare of the poor, and only two inspectors receive payment, the funds available for the continuance of the Council's work have become seriously reduced. If a few public-spirited citizens or companies would each subscribe a hundred pounds annually to these funds, a motive power would be maintained in London which has already conferred vast benefits upon thousands of poor persons, and without

which there would be no inducement to vestries and district boards to perform the oft-neglected sanitary administration of their localities. We trust the Lord Mayor's appeal will meet with a ready response.

SPLENECTOMY IN SPAIN.

DR. MAS, of Valencia, has performed splenectomy with an entirely successful result. This is the second time that the spleen has been extirpated in Spain, one other case having been done by Dr. Ribera Sans. Dr. Más's patient was a married woman who had had children. For some years she had noticed a tumour in the left loin of the size of an egg, but after her last confinement this increased in size and caused a great deal of distress. On examination, a large smooth mass, giving the impression of containing liquid, and dull on percussion, could be made out in the left hypochondrium, the usual splenic dulness being absent. An exploratory puncture was made, and a clear, non-albuminous liquid obtained, which when examined proved to be of hydatid origin. The question then arose as to the organ in which it was seated. By a process of exclusion, the spleen was fixed upon as the affected organ, and it was also made out that it was both hypertrophied and out of place. The patient was extremely anxious that something should be done, and Dr. Más, knowing the danger of leaving such a tumour without interference, decided on performing splenectomy, having first satisfied himself that there was no leukæmia. He mentions that he was so affected by the preparations made for this important operation, and by the sight of the assistants who were to help him, that he almost fainted, and so, of course, was in no condition to operate at the time appointed. Three days later, however, he went to the house alone, gave the woman chloroform, lifted her on to a table, and extirpated the spleen, with a hydatid tumour as large as the fœtal head at term, without any skilled assistance. The wound was dressed antiseptically, and the patient made an excellent recovery, returning to show herself in first-rate health seven months afterwards. The blood was examined at the time of recovery, and was found to show no signs of leukæmia.

HALF-HEARTED HYGIENE.

THE Italian journals report a meeting of the Neapolitan "Consiglio Comunale," from which it appeared that cholera prevailed extensively in the city during 1887, but that the fact of its prevalence was not allowed to figure in the reports of the sanitary office, lest it might cause panic, and, among other evil consequences, scare away the English and American sojourner. There was, indeed, some controversy between the Commune and the Prefecture on the subject, the former insisting on keeping the ugly fact dark, the latter urging that the truth should be proclaimed, the enemy faced, and, at whatever cost to the town, expelled by every means known to hygiene. The former triumphed, and the chief civic authority of the year in question, the Duca di Noia, was actually complimented on the "misura patriottica" (the patriotic step) he took by not alarming the city or the stranger within its gates! Our Italian friends should know that it is not by such policy that they will retain their foreign visitors, that to ensure intelligent and efficacious co-operation against such an invader as cholera they must not conceal the fact of its presence, and that the attempt to combat disease with the one hand while enjoining silence as to its prevalence with the other is about the last course to pursue in their own interests at home and abroad. In 1884, it is now admitted, Turin was far more heavily visited by cholera than was allowed officially to appear, while the British or American public, in many cases representing valuable lives, were lured by a false sense of security to remain in the city. For similar reasons many of the Italian towns furnish no regular tables as to the death-rate of their population, while those that do are not above the suspicion of so manipulating the returns of mortality as to make their sanitary condition show to better advantage than the reality warrants. Surely such ostrich-like policy is unworthy of the scientific advancement or the national pretensions of the Italian kingdom.

THE LIVERPOOL MORTUARY.

As yet no settlement has been made with regard to the question of the burial of bodies removed from outlying districts to the Prince's Dock Mortuary. The Town Clerk properly points out that the statutory power for the burial of the dead, when the body is not claimed, devolves upon the Board of Guardians of the parish in which the body is situated; but there is no legal obligation upon any authority to under- take the interment of a body found in the street or other open place. The objection of the Liverpool Select Vestry is that they should not be called upon to bury bodies removed to the mortuary in their district from outlying parishes unless the cost is borne by the Boards of Guardians of those parishes. The Liverpool Corporation appear to be in the position of a local authority not having exercised the powers which devolve upon them under the Public Health Act, but desirous of encouraging the use of a mortuary situated in one of the Poor-law districts, and sympathising with the desire of that parish not to bear the burden of the expense of burial of any but its own parishioners. The 141st Section of the Public Health Act, 1875, empowers the sanitary authority to provide a mortuary; and, further, to provide for the decent and economical interment, at charges to be fixed by bye-laws, of any body which may be received into it. The course which appears to be indicated is that the Corporation should at once exercise these powers, and in their bye-laws arrange for the payment by the different Poor-law authorities of the cost of burial of bodies belonging to them.

NECROSIS AND GANGRENE PRODUCED BY CARBOLIC ACID.

DR. MAX KORTIUM of the Schwerin Town Hospital, writing in the *Internationale Klinische Rundschau*, mentions several cases which he has seen, and several more which have been reported to him by medical friends, where carbolic-acid applications have been followed by necrosis of bone or sloughing of the soft parts. In some cases there was no doubt that the patient had used much stronger lotions than were prescribed; in others it was possible that where patients or their friends mixed the solution they did not do it properly, and so some of the acid may not have been dissolved at all, and may thus have come in contact with the skin in an undiluted state. In all the cases referred to, the part affected was either a finger or a toe, and there had been a watery solution of carbolic acid applied continuously for from three hours to five days. There was always great difficulty experienced in getting the wounds left by the necrotic action of the acid to heal. Dr. Kortium quotes from Dr. Neill's paper in the *Edinburgh Medical Journal* for 1886, showing the action of carbolic acid on the sensory nerves. He points out that Dr. Neill recommended glycerine solutions, finding that glycerine tended to prevent the ill effects of carbolic acid; also that all his experiments were made on the trunk or on parts of the body much larger than fingers and toes. In the case of these latter organs, Dr. Kortium suggests that, when surrounded by lint soaked in a watery solution of carbolic acid, the latter, owing to its great power of penetration, enters into the finger or toe from all sides at once, and

therefore is able to act very energetically on the nerves. Every surgeon is acquainted with the action of carbolic lotions on the sensory nerves—irritant at first and subsequently benumbing. If a similar effect is produced on the vaso-motor and trophic nerves, it is not difficult to understand that continuous action may cause a stoppage of the circulation, and thus set up necrosis or gangrene to a greater or less extent. Again, it is possible that the carbolic acid acts also in virtue of its capacity of coagulating albumen. Of course these evil effects of carbolised applications are only occasionally observed. This is probably due to the fact that some persons have a peculiar idiosyncrasy for this drug. It is remarkable that almost all the cases which have come under Dr. Kortium's notice have occurred in females. The conclusion he arrives at is that, when dealing with wounds of fingers and toes, watery applications of carbolic acid are best avoided. This, of course, does not apply to lotions used for syringing or washing the wound, but only to applications that are to remain for some hours or days. For this purpose creolin or corrosive sublimate lotions are to be preferred.

THE DUTIES OF MEDICAL OFFICERS OF HEALTH.

THE Ormskirk Local Board of Health have adopted a resolution asking medical practitioners in their district to notify cases of infectious disease, and to explain to the medical officer of health what appears to be the cause and circumstances of the outbreak, and the steps that are being taken to prevent a spread of the disease, and recommending that the medical officer of health should meet the practitioners thus notifying, and consult as to what further action, if any, is necessary to prevent the spreading of the disease. This resolution is evidently the outcome of some local friction. It is, of course, desirable that medical officers of health should exercise discretion and tact in their dealings with medical practitioners, and this becomes especially important where the health officer is himself engaged in private practice. No resolution, however, of a local authority can take away rights of entry or relieve the medical officer of health of the responsibility which devolves upon him under the law; but there is no reason why, if both the officer and the private practitioner are actuated by proper motives, the duties of the one should clash with the interests of the other.

A RARE CAUSE OF DILATATION OF THE STOMACH.

DR. OTTO PERTIK, of Buda-Pesth, describes and figures (*Virch. Arch.*, cxiv., 3) a singular abnormality, causing obstruction to the onward passage of the contents of the stomach, and leading thereby to great dilatation of the viscus. The defect consisted in a curious pouch of mucous membrane, shaped like the finger of a glove, about eight centimetres in length and three centimetres wide, which projected into the duodenum, with the upper part of which the posterior wall of the pouch was continuous. This first part of the duodenum was much dilated, and its mucous membrane quite smooth, passing continuously into the mucous membrane which formed the internal as well as the external coat of the abnormal pouch. The mouth of the pouch thus looked upwards, and anteriorly it had a free lip or margin, close to which the common bile duct opened, suggesting the possibility of the formation of the pouch in an abnormality of the fold of mucous membrane that occurs at the orifice of the duct. But there was no evidence of gall-stone or any other cause which could have produced it. The probability is that the pouch was formed from one of the valvulæ conniventes, although the precise mechanism of its production is obscure. The entire absence of the folds from the dilated duodenum above the pouch may doubtless be ascribed to the distension which this portion of gut underwent in common with the stomach. In introducing the subject, Dr. Pertik makes some general remarks upon the etiology of gastric dilatation. Exclusive of congenital strictures of the pylorus &c., he points out that the diminished power of the stomach to expel its contents may be brought about by: 1. Obstruction at the outlet—as from cicatricial or malignant strictures, hypertrophy of the muscularis or mucosa at the pylorus, polypi or tumours in the pyloric region, or external pressure on this part by tumours in the vicinity. 2. An actual loss of muscular power in the stomach, without any obstruction—as following on chronic catarrh, extensive ulceration, carcinomatous infiltration, peritonitic adhesions; and general conditions leading to loss of tone—as anæmia, typhoid fever, phthisis, &c. 3. An excessive amount of contents, as has been observed in the polyphagous, diabetics, and vegetarians; so that the pyloric orifice becomes relatively too small for the ready passage of the bulky gastric contents. The curious case related above falls, of course, under the first head, but the obstruction was in the duodenum, and not at the pylorus.

LEICESTER PROVIDENT DISPENSARY.

A STORMY meeting of the subscribers to this institution was held at Leicester on the 9th inst. Organised on much the same lines as similar dispensaries in other parts of the country, the Leicester Dispensary has probably obtained greater success than in most other towns, if mere number of members and financial results be considered. During the past two or three years, however, much dissatisfaction has been expressed by both members of the profession and the public at the way in which the management was being conducted, more especially as regards the fact that the real management had passed out of the hands of the Board. About a year ago, at the annual meeting, the Rev. Mr. Isaacs endeavoured to bring things to a crisis, and attempted to have a committee of inquiry formed, but without success, owing to the unwillingness of the Board of Governors to adopt his proposals. On the 9th inst., at the meeting alluded to above, the same matters were again brought forward, but this time in the form of a report signed by a number of influential gentlemen, including members of the profession, who had held an informal inquiry, and after a long and somewhat stormy discussion a formal investigation was agreed to, and the Board, together with six of those gentlemen who have already been making the informal investigation, will shortly proceed to take evidence as to the matters of complaint, with the proviso that no inquiries are to be instituted into any matters dating back more than five years.

THE ETHICS OF CANNIBALISM.

THE question of over-population presents no difficulties to the writer of the article upon the "Ethics of Cannibalism" in the *Fortnightly Review*. In these days of ever-increasing competition, "What shall we do with our boys?" has often been asked, but Mr. H. H. Johnston, the celebrated traveller, is probably the first to suggest as an answer, "Eat them." If at all doubtful about the propriety of eating the young and innocent, he is perfectly clear about the disposal of the old and useless, and he believes that, in fear of consumption, our elderly relatives would "wax in amiability as they waned in strength," and even suggests that in the future a conscientious person "who felt himself effete would offer himself up for reabsorption." Tastes differ. It is an old aphorism that questions of taste afford no ground for dispute. It is sound enough for our writer to express a personal preference as regards burial. Mr. Johnston

feels it would be a source of actual satisfaction to know that his earthly tenement had found sepulture in the bodily systems of his fellow-humans—that his component atoms, or a good proportion of them, had re-entered on active work in society, instead of "languishing in the inactive forms of cemetery flowers and evergreen shrubs"; but he stops short of saying that he himself would enjoy this form of animal food; indeed, he considers it is fortunately a question "rather to be considered a thousand years hence than now." He is evidently only half-hearted about it, and does not wholly think it will work, in spite of the obvious advantages he describes.

SANITATION IN "NEW JERUSALEM."

"NEW JERUSALEM" is an unfortunate name to belong to a village in the township of Sharlston, in the Wakefield Union, for the description of the place which is now before us carries with it no notion of those attributes which are generally associated with the name. The place seems, indeed, to be in an abominable state. As is so frequently the case in Yorkshire and Lancashire villages, two parallel rows of dwellings have built between them a row of filthy midden-privies, on to which the back windows all open; but in New Jerusalem space seems to be a matter of consideration, and so the line of offensive middens is within three feet and a half of the rows of houses. Then, again, drains are blocked wholesale; sewage matter is to be found in cellars; six houses in some parts go to a privy; water is so scarce that from 10*d.* to 1*s.* 3*d.* has to be paid by women for a week's supply, which is doled out in buckets by a man who gets it from a well in a neighbouring wood; and out of twenty-two deaths from scarlet fever that have occurred in the district, eleven have taken place in New Jerusalem. Captain Norwood, speaking of the hamlet, and allowing for his knowledge of the slums of cities and other towns, could only say that it was a disgrace to humanity and civilisation, and that he had never set foot in a more abominable place. It would seem evident that "New Jerusalem" cannot come within the provisions of the Public Health Act, 1875, since that Act provides for a sanitary authority and for sanitary officers; and there is obviously no indication of the labours of such bodies in the description just published of this spot with so euphonious a name.

SUGGESTED LIMITATION OF BELGIAN PHARMACIES.

A MOVEMENT is on foot in Belgium to get an act passed limiting the number of pharmacies. Dr. Kuborn has drawn up a report to the Belgian Academy of Medicine on the advantages of this system. He remarks that the public require three things: (1) to be able to procure the best possible drugs, (2) to get them at a moderate price, and (3) to have facilities for obtaining what they require without delay. Regarding the first point, Dr. Kuborn contrasts the quality of the drugs obtainable in German pharmacies, which are strictly limited in number, with that of those to be found in pharmacies in Holland and Belgium, in which countries any qualified pharmacist may set up a shop wherever he pleases. The advantage is with the Germans, for, owing to the smaller number of establishments, a far better and more efficient control can be exercised over them by inspection, added to which the absence of competition tends to prevent drugs of inferior quality being kept. With regard to price, too, the limitation system is satisfactory; the German pharmacists are obliged to sell according to a published tariff, not being allowed to charge more or less than the official price, which is, as a matter of fact, moderate enough, and by no means higher than in countries where there are no restrictions. If it be thought that the limitation of pharmacies tends to prevent their establishment in country places, Dr. Kuborn assures us that it is not so; that where there is freedom there is but little tendency for pharmacists to distribute themselves about in rural districts, they, on the other hand, preferring to crowd into towns and so to enter into competition with one another. One interesting historical fact is mentioned in the report—viz., that the limitation of druggists has existed in Hungary since the 13th century, druggists being even then forbidden to keep any article for sale except medicine. The value of the goodwill of a Hungarian pharmacy is, like that of a public-house in this country, very considerable, varying from £500 to £10,000; and it is said that all kinds of influences are brought to bear upon the licensing authorities to obtain permission to establish new pharmacies. On the other hand, it is claimed that the freedom from competition raises the social and moral status of the Hungarian pharmacists, so that they enjoy a position very superior to that held by their brethren in countries where there is a greater approach to free trade. The Belgian medical men appear to think that it would be for the advantage both of the public and of the medical and pharmaceutical professions to limit the number of pharmacies. We imagine they will find it difficult to persuade the public that it has anything to gain by a restrictive law.

CLINICAL INSTRUCTION IN FEVER.

THE proposal to make the fever hospitals of the Metropolitan Asylums Board available for medical education is one which will commend itself to all. For the London medical student at present enjoys but little opportunity of becoming acquainted with cases of measles, scarlet fever, small-pox, and other infectious diseases with which he will be confronted when in practice, since such cases are admitted into very few of the general hospitals, owing to the absence of means of isolation. We are glad to observe, therefore, that the subject is to be brought under the notice of the College of Physicians, and trust that a way will be found for carrying into effect what cannot but be considered a very great improvement in clinical training. It is, however, a large question, and requires to be carefully viewed on all sides.

THE LATE DR. GREENHOW.

As an illustration of the excellency of the late Dr. Greenhow's judgment in matters relating to the appraisement of the "expectation of life," it is mentioned that, notwithstanding that nearly two and a half millions of public money passed through his hands in his position as advising officer to the Government in the matter of commutation of pensions to officers retiring from the public services, he was never once proved to be more than two years out of his reckoning. This fact, if such it be, is a statistical tribute of which any medical man might well be proud.

EXPERIMENTAL IODOFORM POISONING.

DR. A. V. KORIANDER of St. Petersburg has endeavoured to throw some light on the vexed question of the suitability of iodoform for use as an antiseptic by poisoning dogs with it, and examining the morbid appearances post mortem. The iodoform was introduced into the peritoneal cavity in quantities varying from 0·3 to 1·5 gramme per kilog. of the animal's weight. The microscopic sections of the organs were stained by hæmotoxylin and lithion-carmine. Nephritis affecting the renal glomeruli was invariably found, and the liver was infiltrated by minute fat granules. These appearances are considered by Dr. Philipovich to be characteristic of iodoform poisoning.

DONDERS AND MOLESCHOTT ON PRE-PROFESSIONAL EDUCATION.

THE great Dutch physiologist and ophthalmic surgeon, in reviewing his educational career, dwelt with gratitude on the classical studies he pursued under clerical auspices at Boxmeer. Certain it is that to that discipline he owed his skill in the use of language and his love for the elevated and refined in thought and expression, which never failed him in after life. Commenting on this avowal of Donders, his biographer Moleschott says that no one who is conscious of his own mental evolution can deny that such early educational influences infuse a love of study for its own sake—a habit of mind which is worth more than all the acquisitions one can make in the secondary schools. We must, he says, do justice to the old Latin (or, as we should say, grammar) school, and acknowledge that it was in no way inferior to the best and most comprehensive of the modern schools in cultivating an eagerness to learn, in awaking a passion for the search after truth, in evoking an admiration of the beautiful. Goethe, in the sixth book of his "Wahrheit und Dichtung," spoke prophetically when he said: "The injury done to our youths by impelling them too exclusively in certain lines of instruction is most manifest when their training in the use of language is minimised and the value of their preparatory discipline impaired, to devote the time and attention thus gained to the inuring them to so-called 'real studies,' which tend more to distract than to cultivate the mind, unless they are carried out with system and with thoroughness." Endorsing this argument, Moleschott adds: "The study of language and literature involves, according to some, a loss of the time which should be bestowed on physical science. But those who think so forget that, in early youth, its instructor must not have in view the exercise of the intellect alone; he must also, and primarily, educate the heart and the taste; he must feed the faculties by which we appreciate and admire the beautiful and the noble; he must kindle enthusiasm for virtue and patriotism; in a word, he must mould the sentiment of duty and the aspiration after the ideal. If, in the prosecution of such discipline, there is the sacrifice of some hours that might be employed on subjects more apparently useful, we have in compensation the development of that large and loving knowledge of man and of the world, the storing up of reflexions which elevate the youth into the noble thinker, who, at a more advanced stage, grasps with ease the facts that are useful, and is preserved from the danger of becoming a mere referee of data or a poor groper after the light." Donders began his professional education, says Moleschott, without being initiated in what Goethe called "real studies," and has never regretted it.

SCALDED IN A BATH.

AS truly as family characteristics and historical events tend to repeat themselves, a singular fatality attends the recurrence of accidents. In spite of the bitter teachings of experience, some of the selfsame errors that were committed twenty years ago are widely prevalent still, and, though perhaps with some change of incident, work out from time to time the same mischievous results. A few days ago a child perished miserably by scalding in a Paris hospital. It had been taken by a nurse into the hospital lavatory to be washed. The bath was filled with boiling water, and the child left beside it during the nurse's temporary absence. Shortly afterwards, two little girls entered the room, and by way of amusement, and thinking no doubt that the bath was ready, proceeded to administer it. The cries of their poor little plaything quickly summoned assistance, but not in time to prevent most painful and fatal injury. The blame of this occurrence directly attaches, of course, to the meddlesome foolishness of two young children. Its occasion reminds us once more of an old but too easily forgotten caution—namely, that in preparing a warm bath the cold water should precede the hot. It is clear that, had this homely but useful rule been observed, the accident above described could not have happened.

SUPERANNUATION OF HUNGARIAN PAROCHIAL MEDICAL OFFICERS.

THE great need felt by district and parochial medical officers in Hungary of a pension fund has recently induced Dr. Oláh, an inspecting medical officer, to draw up a scheme for the formation of a fund amounting to £300,000. This is to be raised in twenty years' time, partly by contributions from district or local funds, and partly by an annual allowance of £2000 from the State exchequer. Of course such an arrangement is highly desirable in the interests of the medical officers, but it is not very probable that either the local authorities or the Ministry of Finance will consent to make such an important concession, which of course is equivalent to raising every medical officer's salary to a very appreciable extent merely at the suggestion of an able and energetic official.

THE CLINICAL SOCIETY.

AT the recent annual meeting of the above Society, the retiring President, Dr. Broadbent, took the chair in that capacity for the last time of holding office. In moving the vote of thanks to the retiring officers, Dr. Ord, the newly-elected treasurer and trustee, struck as his key-note the vigour displayed by the Society during Dr. Broadbent's term of office. Dr. Glover, in proposing the vote of thanks to the President, commented upon the small share taken in the Council by general practitioners; but that the Society did try to put itself in touch with the various sections of its members would be seen from the election to the Council of provincial members as well as of at least one, if not two, general practitioners living in London. The acclamations which greeted the vote of thanks to the retiring President was a measure of the feeling of the Society for services well rendered and dignity upheld during his tenure of office.

SIR WILLIAM GULL.

WE are glad to be able to state that Sir William Gull has entirely recovered from the effects of his recent attack of illness.

FOREIGN UNIVERSITY INTELLIGENCE.

Bordeaux.—M. le Dr. Merget has been appointed Professor of Physics.

Buda-Pesth.—It has been found necessary to make some new regulations on the subject of the title *privat-docent*, which has hitherto been translated *magántanár* (private professor), so that the holders of the title—which, of course, means only licensed lecturer or teacher, and is almost exactly equivalent to that of extra-mural lecturer in Scotland—have usually been addressed as "*Herr Professor.*" It is now announced that the title is to be reduced by a more exact Hungarian equivalent for the German, *docent* being substituted for the term *magántanár*, but that at the same time the qualification is to be raised by the requirement of a higher standard of scientific knowledge; also that the University will in future exercise a more stringent control over the work of the *privat-docenten*. The chair of Anatomy, vacant by the death of Professor Lenhossék, and which is being temporarily filled by the deceased professor's son, is likely to be given to Dr. Ludwig

Thanhoffer, formerly Director of the Veterinary Institute. The names selected for the chair of Clinical Medicine are those of Drs. Kélti, Purjesz, Bókai, and Jendrassik. The appointment to the third of the vacant chairs, that of Pharmacology, held by the late Professor Balogh, does not seem to have been yet made, though the name of a Klausenberg professor is mentioned in connexion with it. It is becoming evident that a third Hungarian university is required, as the number of Hungarian medical students, which was only 634 last year, is insufficient to keep up a due supply of practitioners in the country.

Dorpat.—Dr. Johannes Brock, of Göttingen, formerly of Erlangen, has been appointed to the chair of Comparative Anatomy in succession to Professor Rosenburg.

Kazan.—Dr. Gay, Extraordinary Professor of Syphilography, and Dr. Skalozoboff, Extraordinary Professor of Neurology, have been raised to the rank of Ordinary Professors.

Madrid.—The name of Don Francisco Marin y Sancho, editor of *La Farmacia Española*, is being brought forward for the professorship of Botanical Pharmacy.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following eminent foreign medical men are announced:—Dr. Leopold Wittelshöfer, immediately after giving up the post of editor of the *Wiener Medizinischer Wochenschrift*.—Dr. Johann Wagner, formerly Professor of Special Pathology and Therapeutics in Buda-Pesth, at the age of seventy-eight.—Dr. Léon Damas, Professor of Midwifery at Montpellier.—Señor Don Dr. Pedro Lletget y Diaz-Ropero, Professor of Botanical Pharmacy in the University of Madrid, member of the Royal Academy of Medicine and of the Sanitary Council.—Dr. A. Bieltsoff, senior surgeon to the Marien Hospital, and *privat-docent* in Surgery in the Military Medical Academy, St. Petersburg.

AT the inquest recently held on the body of a platelayer killed while "fogging" at Norwood, it was stated that the deceased had been on duty eighteen out of the twenty-four hours, and the jury recommended that the facts should be forwarded to the Home Secretary. It is certainly amazing that this matter of the overwork of railway officials should not awaken more general interest, seeing that it is connected so intimately with the safety of the travelling public, to say nothing of the hardship inflicted on the *employés* themselves.

AN International Congress of Physiology will be held at Basle on Sept. 10th, 1889. The Congress, the idea of which originated with the English Physiological Society, will also embrace the subjects of anatomy, histology, physics, chemistry, experimental pathology, and pharmacology.

THE series of lectures now being delivered by Professor Meymott Tidy at the Middle Temple are entitled "Toxicology: a Forensic Study." The first lecture was given on Wednesday last, and the remainder will follow on the 23rd and 30th inst., commencing at 4.15 P.M.

DIPHTHERIA is announced to be prevailing in a virulent epidemic form in the town of Nagy, in Hungary. The schools have been closed, and a panic prevails owing to the excessive mortality amongst children.

HÆMORRHAGIC, or "black" small-pox is stated to prevail in Adrianople; and sanitary cordons, with medical inspection, have in consequence been imposed on the Villayet by the Bulgarian Government

A MEETING of the London University College Medical Society will be held in the Botanical Theatre, University College, Gower-street, W.C., on Wednesday, Jan. 23rd next, when an address which we hope to publish at an early date will be delivered by George Vivian Poore, M.D., F.R.C.P., on "London, Ancient and Modern, from a Medical Point of View." The President, H. P. Dean, M.B., B.S., will take the chair at 8 P.M.

HEALTH OF THE NAVY.

THE statistical report on the health of the navy for the year 1887 has just been published. Before proceeding to an examination of the details respecting the sickness and mortality of the force, it is necessary to note a change which has been made in the mode of calculating the ratios. It has hitherto been the practice to do so on the strength of the men present, omitting those "on short terms of leave of absence, and the sick under treatment in hospital," amounting, as it appears, to about 3 per cent. of the force. The result of this has been that the death-rate was always a little too high. In the present report the calculation has been made on the actual strength, present and absent, and therefore represents the loss accurately. But as any cases of sickness occurring among the men while on leave do not appear on the returns, this change will have the effect of slightly understating the sickness, but not to such an extent as materially to affect the results.

During the year 1887, the average strength of the service afloat was 48,410 officers and men; the admissions on the sick list were 49,321, the deaths 403, the invalids discharged the service 928, and the mean daily sick 2133. These numbers give the ratios of 1019 cases, 8·32 deaths, 19·16 discharged invalids, and 44·06 daily sick per 1000 of the force. With the exception of the deaths, these results correspond very closely with those of the preceding year. The death-rate was 1·44, or, if a correction be made for the difference in the mode of stating the strength, 1·70 per 1000 higher than in 1886. The increase was entirely due to the loss of the *Wasp* gunboat in the China Sea on its passage from Singapore to Hong Kong. If the 80 drowned in her be deducted, the death-rate in the two years will be found to be identical. In the whole force the deaths from wounds and injuries and suicides amounted to 166, or 3·41 per 1000 of strength; the death-rate by disease, therefore, was only 4·31 per 1000; in 1886 it was 5·05 per 1000.

On the Home Station an average force of 23,700 furnished 812 cases, 5·73 deaths, 24·76 invalided, and 43·95 constantly sick per 1000. It is this station, however, which is almost exclusively affected by the change in the system of computing the strength. If the total difference be deducted from the strength above stated, it will be reduced to 22,248, and the ratios calculated upon these numbers will be—cases 865, deaths 6·11, invalided 26·38, and mean sick 46·82 per 1000. Compared with the results for the preceding year these show an increase in the cases and mean sick, but a decrease in the deaths and discharges by invaliding. Measles prevailed as an epidemic in the *Britannia* training ship, in February and March, 73 cases having occurred without a fatal result. It also prevailed, though to a much less extent in the boys' training ships *Lion*, *Boscawen*, *Ganges*, and *Impregnable*. Scarlet fever appeared among the boys of the *Impregnable* at Plymouth in September, and cases continued to show themselves till the beginning of December; there were altogether 17 cases on board with 1 death, that of the last boy affected. There were 6 cases on board the *Lion*, also at Plymouth, all of which recovered. The disease was prevalent on shore. There were 37 cases of enteric fever, with 5 deaths; 5 of these, including one of the fatal cases, were believed to have been contracted at Gibraltar, on board the *Monarch* and *Minotaur* when alongside the new mole near the mouth of one of the main sewers of the town, which had been damaged so that it was uncovered at low water. The other four fatal cases were at Portsmouth. An epidemic of mumps occurred on board the *Britannia*, 124 cases being admitted, and 9 in the *Boscawen*. There were 6 cases of diphtheria, with 1 death; 4 of them occurred in

the *Ganges* at Falmouth, where there had been sporadic cases in the neighbourhood of the ship for some time. The fatal case was that of a boy of the *St. Vincent*, who died in Haslar Hospital. Venereal diseases were much more prevalent than in 1886, the admissions having been 22 per 1000 in excess of that year; the difference was most marked in cases of syphilis. There was a decrease in the admissions by lung disease, but the death-rate was almost identical in the two years. The *Lion* training ship at Portsmouth still furnishes a high proportion of cases and deaths, notwithstanding some improvements introduced into the hygienic condition of this vessel during the year; of the 7 deaths in her, 5 were from pneumonia. The deaths on the Home Station from injuries were 25, and by suicide 2, being in the ratio of 1·12 per 1000 of strength; 11 of these deaths were by drowning.

The average strength of the force on the Mediterranean Station was 5680; the cases were 1106, the deaths 9·68, the invalided home 51·76, and the mean sick 41·22 per 1000. Compared with 1886, these ratios show a decrease, except in the deaths, which were 2·4 per 1000 higher. The most fatal disease was enteric fever, of which 34 cases occurred with 15 deaths, being in the ratio of 5·98 and 2·64 per 1000, the former considerably lower, but the latter higher than in 1886. Of the cases, 5, including 3 fatal, appear to have been contracted at Corfu; 3, with 1 death, at Gibraltar; 3, all of which recovered, at Constantinople; 2 fatal cases at Alexandria; 1 fatal case on the coast of Spain; leaving 20, of which 8 died, which may be presumed to have occurred at Malta. Some of these were probably the concluding ones of the epidemic which prevailed there in 1886. Since March, 1887, there has been a marked reduction in the cases, which is attributed by Fleet Surgeon Maclean to the new water supply which was then introduced. An epidemic of cholera occurred in Malta in August, September, and October, 675 cases being reported among the civil population, with 434 deaths; but only 1 case, which terminated fatally, occurred in the navy. The disease is said to have been "confined to the poorest and most insanitary localities," in which the new system of water supply had not been completed. The deaths from injuries, including suicide, were 14, or 2·45 per 1000, 8 of them being by drowning; the proportion corresponds very closely with that of the preceding year.

On the North American and West Indian Station, a force of 2700 gave 1100 cases, 6·29 deaths, 34·07 invalids, and 36·45 constantly sick per 1000, showing a decrease from the preceding year except in the invaliding. Only 5 cases of enteric fever occurred, with 1 death, that of an officer who is supposed to have contracted the disease on shore at Montreal. There was no other death from any form of fever. The deaths from injuries, including suicide, were 9, or 3·33 per 1000, being upwards of half the total mortality; seven of these were by drowning.

On the South-East Coast of America the force amounted only to 530, among whom the admissions were 779, the deaths 5·66, the invalided 11·32, and the mean sick 26·98 per 1000. There was no marked prevalence of disease which calls for comment.

On the Pacific Station the average strength was 1550; the admissions were 1081, the deaths 4·51, the invaliding 20·64, and the mean sick 39·29 per 1000; the admissions and deaths were higher, but the invaliding and mean sick lower, than in 1886. Of the 7 deaths, 4 were by injuries, one of them being that of a man accidentally shot while acting as marker at the rifle range at Honolulu, and two by drowning.

The West Coast of Africa and Cape of Good Hope Station had an average force of 1720; the admissions were 1217, the deaths 6·97, the invalided 41·86, and the mean sick 38·69 per 1000, all higher than in 1886, except the deaths, which were almost identical in the two years. The increase in the cases was almost entirely due to malarial fevers, "chiefly the result of the expeditions up the Niger and other rivers during the latter portion of the preceding year. ..... In these African river expeditions the primary fever resulting is by no means the last or worst of the effects to be expected, as will be seen by the extracts from the journals of the affected ships; the men who are attacked in the first instance often suffer from more than one recurrence of the disease, sometimes in a different form, and, besides the general temporary health deterioration consequent on the attack, often appear to acquire a susceptibility to morbific influences of the same nature, which may last for years, and which is not confined to their service on the African coasts, but renders them liable to ague and recurrence of remittent fever in all parts of the world." An attempt was made in the *Goshawk* to ascertain the relative prophylactic effects of arsenic and quinine, but the experiment was so defective in many respects that no satisfactory conclusions could be drawn from it. One-third of all the deaths on the station were the result of injuries.

The strength of the force on the East Indies Station was 2200; the admissions were 1773, the deaths 9·09, the invalided 71·36, and the mean sick 54·94 per 1000, all higher than in 1886 except the invaliding, which was the same in both years. There were 12 cases of enteric fever, with 4 deaths; 8 of the cases, with 1 death, occurred on board the *Bacchante* at Bombay and Ceylon, and were attributed by the medical officer to the native-made lemonade on shore, "as the water used in the manufacture of these beverages, as I have personally observed, is from very suspicious sources." Two of the other deaths by this cause occurred at Rangoon, and one on board the *Sphinx*, probably contracted at Karachi. There were 94 cases of dengue during the year, 56 in the *Algerine*, 22 in the *Briton*, and 16 in the *Osprey*. The disease was prevalent at Bombay during the first two months of the year. There were 2 cases of fish poisoning at Zanzibar in two shipwrights landed with a working party at Hawi Island. They had eaten a species of clam found on the island, though cautioned by a native that they were unwholesome at that season. The symptoms were severe gastric irritation, abdominal pain, flatulence, and vomiting. One of the men died on the seventh day, and the other was invalided home after an illness of fifty-six days.

On the China Station, a force of 3640 gave 1287 cases, 6·04 deaths, 27·19 invalids, and 50·07 constantly sick per 1000; all except the invalids being under the proportion in 1886. There were 14 cases of enteric fever, with 2 deaths. Shanghai, Colombo, and Hong Kong are indicated as the places where the disease was contracted. There was only one case of cholera, which occurred at Hong Kong and terminated fatally. Two fatal cases of heatstroke occurred at Hong Kong.

The average strength on the Australian Station was 1550; the admissions amounted to 1480, the deaths to 9·67, the invaliding to 18·06, and the mean daily sick to 48·75 per 1000. These ratios differ little from the preceding year, except the mean sick, which shows a reduction of nearly 5 per 1000. There were 20 cases of enteric fever, with 4 deaths; and of these, 13 cases and 2 deaths were in the *Swinger* gunboat in Cockatoo Dock. This dock and its surroundings have been in a most insanitary condition for a long time, and reported as the cause of several outbreaks of enteric fever. After the *Swinger* left the dock, however, the colonial authorities undertook extensive and important works, and when these are completed there seems good reason to hope it may be found healthy. Of the other cases, 4 were believed to have been contracted in Sydney and 1 in Melbourne. There was a marked increase in the prevalence of malarious fevers, as a result of the vessels being employed at New Guinea and the New Hebrides; there was, however, only one death from them.

The irregular force had an average strength of 5140; the admissions were 1119, the deaths 22·56, the invaliding 18·09, and the mean sick 46·35 per 1000. The deaths were greatly in excess of the preceding year, but this was the result of the loss of the *Wasp*, already alluded to, in the China Sea. If the 80 deaths thus accounted for be deducted, the ratio would be 7·00 per 1000, or about double that of 1886. In other respects the ratios do not greatly differ. There were 14 cases of enteric fever entered, with 6 deaths. Nine of the cases and all the deaths were on board the *Orontes* troopship; they occurred between Jamaica and Penang. The source of the disease could not be traced. There were 16 cases and 5 deaths of heat apoplexy; 4 of the fatal cases were in Indian troopships, 2 of them in the Red Sea, 1 at Bombay, and 1 in the Gulf of Aden; the fifth death was in the *Orontes*, between St. Vincent and Ascension.

There was a force of 6990 marines at head-quarters not included in the preceding returns. The cases among them were 910, the deaths 2·58, the invalided 50·07, and the mean daily sick 51·38 per 1000. These are all lower than in 1886, but part of the apparent reduction may be due to the change in the system of enumerating the strength. The death-rate is extremely low. Half of the deaths were from diseases of the respiratory system. There was no

death from injury except one suicide. There is a very remarkable difference in the sickness in the various divisions. In the Plymouth Division the admissions and mean sick have not amounted to half the proportion in the Eastney and Portsmouth Divisions, and have been very much lower also than in the Chatham Division and the Walmer Depôt. In the preceding year Chatham was the most healthy, but the difference was not so great as is shown in the present report.

A table is given in the report of the cases of disease or injury occurring among the workmen in the different naval dockyards, with the results; but, as no information is afforded of the numbers employed, it is of no value. It would be interesting if the average number of men employed in each were also stated.

COMPARATIVE VALUE OF CHEMICAL SUBSTANCES AS ANTISEPTICS.

AT a recent meeting of the Society of Chemical Industry, held in London, Mr. C. T. Kingzett, F.I.C., F.C.S., read an interesting and instructive paper upon the comparative antiseptic values of chlorides, nitrates, sulphates, and other chemical substances. The experiments carried out were of the simplest character. An extract of beef was made by digesting 5 lb. of fresh lean beef in water at a temperature not exceeding 40° C.; this, after filtration, was cooled and made up to five litres. Ninety-five cubic centimetres of this extract were taken, to which were added five cubic centimetres of a 5 per cent. solution of the antiseptic to be tested. The solutions were then examined from time to time, and the days upon which they became putrid were recorded. In those cases where the antiseptic is not soluble in water to that extent, the boiled solution containing that quantity was used. The author believes that the true antiseptics, as they act in relation to any *one* micro-organism, so do they to any *other* micro-organism, either by destroying it or bringing about such a change in the composition of the medium as to render it incapable of sustaining the life or subsequent development of the respective species. According to this view, he therefore claims for his experiments truly comparative results, which were briefly as follows:—

The solutions containing the chlorides of potassium, sodium, ammonium, barium, strontium, calcium, and magnesium, as well as the standard extract, were putrid on the fourth day; chlorides of iron, lead, zinc, and tin were putrid on the ninth day; chloride of aluminium was putrid on the fifteenth day; chlorides of copper and mercury remained unchanged.

The nitrates of potassium, sodium, ammonium, barium, strontium, calcium, magnesium, and iron were putrid on the fourth day; nitrate of zinc on the sixth day; nitrate of lead on the ninth day; nitrates of copper and mercury remained unchanged.

The sulphates of potassium, sodium, ammonium, magnesium, iron, and manganese were putrid on the fourth day; sulphate of zinc on the fifth day; sulphate of aluminium on the eleventh day; sulphates of copper and mercury remained wholesome during the whole period of observation—viz., sixteen days.

The following other substances, with some selected chlorides, nitrates, and sulphates, were then examined:—Five cubic centimetres of a saturated solution of "salufer" (Thomson's fluosilicate of sodium); five, ten, fifteen, and twenty cubic centimetres of ordinary "sanitas" fluid; five cubic centimetres of bactericide (i.e., a solution containing 5 per cent. mercuric chloride in peroxide of hydrogen of five-volume strength). The mixtures became putrid in the following order:—The standard beef solution on the third day; the sulphate of zinc and nitrate of lead mixtures on the fifth day; the 5 per cent. "sanitas" on the sixth day; the chlorides of lead and tin mixtures on the seventh day; the "salufer" and sulphate of aluminium mixtures on the eighth day; the nitrate of mercury and chlorides of iron and aluminium mixtures on the twelfth day; the chloride of zinc mixture on the fifteenth day; the nitrate of zinc mixture on the twenty-first day. The mixtures containing ten cubic centimetres and upwards of "sanitas," as well as those containing "bactericide" and the chlorides and sulphates of copper and mercury, remained unchanged during the whole period of observation—viz., thirty-four days.

Finally, experiments with 5 per cent. solutions of the following substances in peroxide of hydrogen of five-volume strength were made:—Potassium hydrate, potassium chlorate, bisulphate of potash, borax, borax neutralised with boric acid, sodium benzoate, ethylic ether, glacial acetic acid, quinine disulphate, quinine sulphate dissolved in slight excess of sulphuric acid, chloroform (5 cubic centimetres chloroform + 50 of absolute alcohol + 45 of peroxide of hydrogen, ten-volume strength), phenol, chloral, hydrochloric acid, oxalic acid, boric acid, and sulpho-phenic acid.

The results were as follows:—The standard extract and the sodium benzoate and neutral borax mixtures were putrid on the third day; the quinine disulphate mixture on the fourth day; potassic chlorate mixture on the fifth day; chloroform mixture on the seventh day; borax mixture on the tenth day; boric acid and the quinine sulphate dissolved in excess of sulphuric acid on the thirteenth day; bisulphate of potassium on the seventeenth day; acetic acid mixture on the nineteenth day; chloral and oxalic acid mixtures on the twenty-fourth day; sulpho-phenic acid on the twenty-seventh day. The hydrochloric acid and phenol mixtures were still good after thirty-nine days.

These results are not without interest. Corrosive sublimate appears to be by far the most powerful antiseptic known, but it also ranks as one of the strongest poisons, and hence objection must be taken to its general use except in the hands of medical men. That nitrate of mercury failed to preserve the beef solution longer than the twelfth day is curious to note. The solution of the red iodide of mercury in potassium iodide, the sulphites and bisulphites, and salicylic acid, all of which are generally recognised as possessing valuable antiseptic properties, do not appear to have been experimented with. However, all through the paper we find a clear record of facts, and an investigation of this character merits the appreciation of all those interested in sanitary science.

EMIGRATION CONFERENCE AT LIVERPOOL.

ELEVEN different philanthropic societies, more or less connected with emigration, held a conference in London last November, and determined on joint action so as to bring pressure to bear on the steamship companies, and secure better accommodation for the steerage passengers. The matter was considerably simplified by the fact that these societies, presumedly from patriotic motives, send the persons they assist only to the Dominion of Canada. Therefore they were able to limit their negotiations to the three lines—the Allan, the Beaver, and the Dominion. On Wednesday, Jan. 16th, representatives, speaking on behalf of these eleven societies, and other bodies which have since adhered, met in the offices of the Canadian Government in Water-street, Liverpool. Among those who were present were Lieutenant Haig, of the Charity Organisation Society; Major Cooper, of the Church Emigration Society; Mr. W. E. Mann, of the East-end Emigration Fund; Mr. G. W. Dodds and the Rev. Mackay, of the Self-Help Emigration Society; the Rev. J. Bridger and the Rev. R. O. Green, of the Society for the Promotion of Christian Knowledge; Mrs. Joyce, of the English Women's and the Scotch Women's Christian Associations, of the Girls' and the Young Men's Friendly Societies; Mrs. Fox, of the United British Women's Emigration Association, and others. Our Special Sanitary Commissioner had also been invited to attend and assist in the discussion. The representatives of the three steamship companies concerned were present to meet these representatives.

The mere fact that these various societies have been induced to take common action, and that the steamship companies were willing to meet and discuss with them, is in itself a very hopeful and wholesome sign. Otherwise it cannot be said that any very great results have been attained. This, however, was scarcely likely to ensue from a preliminary meeting.

The first question raised related to the separation of the sexes. The practice in some ships of allowing a number of married couples to live with their children in one cabin without any partitions to divide the different families was unanimously condemned, but it appeared that this was not allowed on either of the three lines of steamships concerned. The married men sleep with the single men. But it was remarked that they went over to the women's quarters to see their wives and children and to mess with them. The representatives of the societies thereupon passed a resolution to the effect that the steerage should be divided into three compartments—one for the single men and married men; one for the married women and their children, which the married men would be allowed to enter during the daytime; and a third compartment for the single women, where no men, excepting the ship's authorised officers, would ever be permitted to enter. This regulation was approved by the representatives of the Dominion and the Beaver lines. Mr. Ellis, speaking on behalf of the Allan line, thought that the presence of married women in the single women's quarters had a very steadying effect, and that the single women were often of help in attending to the children. Lieutenant Haig coincided in this opinion, but the majority were decidedly in favour of a separate cabin for the married women.

Mr. Mann, who was in the chair, then broached a much more difficult question. The societies proposed that the three companies should every five weeks reserve one ship each, in which it should be understood that not only would the system of separation described above be carried out, but by which no foreigners would be allowed to cross. Some foreigners are so dirty in their persons and in their habits that they occasion the greatest inconvenience, and are the subject of constant complaint. On the other hand, the Allan line have some 40 per cent. of their passengers foreigners, and the majority of these are Scandinavians—that is to say, exceptionally clean and orderly passengers. The emigration societies replied that they did not like to make invidious distinctions between nationalities, and this really caused their case to break down. The companies could not undertake to exclude foreigners once every five weeks from their ships. Such a proposal, if applied only to the Polish Jews and the Italian organ-grinders, &c., might have been taken into more serious consideration. Also the emigration societies had no tangible offer to make in exchange for the suggested disturbance of the traffic. It was ultimately decided that the companies would continue to deal, as in the past, individually with the societies that sent them emigrants; but that, if at any time a society or a group of societies could promise a certain number of emigrants, arrangements might be made for a special ship, and then only a special class of emigrants would be allowed on board.

In respect to sanitary matters our Commissioner raised the question of hospital accommodation, urging that there should be more than two hospitals, so that infectious cases of the same sex might be separated. The representatives of the companies protested that there were generally four hospitals on board; and when our Commissioner replied that this was not always so, he was told that the messroom or some other cabin belonging to the crew would on an emergency be converted into a hospital. The question of sanitary accommodation below deck for nights or during bad weather was only briefly touched upon, as this was a point the emigration societies have not yet considered. Then there was considerable conversation concerning cattle ships, and several gentlemen present testified that in their experience they had found that steerage cabins which had previously been used for cattle did retain a special odour. It was for medical men, they urged, to say whether such odour could be injurious; and offers were made to urge upon the Canadian Government to prepare statistics so as to ascertain the comparative health of passengers after landing who had come over in cattle ships and those who had crossed on ships that did not carry cattle. After the customary vote of thanks, the conference adjourned amid general congratulations and expressions of goodwill on all sides.

IMPURITIES IN INDIAN WHEAT.—A circular from the India Office has been addressed to the principal millers and all the Chambers of Commerce in the United Kingdom, asking for information with regard to the effect on trade of impurities in Indian wheats.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

AT a meeting of the Council, held at their rooms, 3, Bolt-court, Fleet-street, on Tuesday last, D. B. Balding, Esq., in the chair, it was resolved that a letter of condolence should be sent to the relatives of the late Mr. James Cornwall, who had been for many years senior vice-president of the Association. At the same meeting attention was also called to the report of a meeting of the Croydon guardians, held on Dec. 18th, 1888, at which it was ordered that in future all the officials of the workhouse infirmary, including the assistant medical officer and steward, should obtain an order from the medical superintendent before leaving the premises, such order to be presented to the gate porter. The Council is of opinion that all reasonable requirements would be met by the guardians consenting to dispense with the written order for all superior officers' absence, the gate-porter having only instructions to record the hour at which all officers left or returned, such record being always available for the subsequent inspection of the board. In reference to the suggestion lately made by the Sheffield board of guardians that a salary should be paid to their medical officers in lieu of fees for midwifery cases, the Council is unanimously of opinion that under no circumstances should the salary include these fees, and they are further of opinion that a uniform fee of one guinea, without regard to ordinary or extraordinary cases, would be an equitable arrangement.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6157 births and 4670 deaths were registered during the week ending Jan. 12th. The annual rate of mortality in these towns, which had been 20·0 and 22·7 per 1000 in the preceding two weeks, further rose last week to 25·5. During the thirteen weeks of last quarter the death-rate in these towns averaged 19·8 per 1000, and was 2·2 below the mean rate in the corresponding periods of the ten years 1878-87. The lowest rates in these towns last week were 16·7 in Brighton, 18·2 in Nottingham, 18·8 in Hull, and 20·0 in Bradford. The rates ranged upwards in the other towns to 30·5 in Preston, 31·9 in Cardiff, 34·6 in Manchester, and 44·3 in Blackburn. The deaths referred to the principal zymotic diseases, which had been 577 and 618 in the previous two weeks, further rose last week to 641; they included 366 from measles, 123 from whooping-cough, 50 from scarlet fever, 36 from diarrhœa, 35 from diphtheria, 31 from "fever" (principally enteric), and not one from small-pox. No death from any of these zymotic diseases was recorded in Halifax or Plymouth, while they caused the highest death-rates in Manchester, Oldham, Salford, and Blackburn. The greatest mortality from measles occurred in Liverpool, Oldham, Huddersfield, Cardiff, Salford, and Blackburn; from whooping-cough in Preston, Blackburn, and Birmingham; from scarlet fever in Oldham and Blackburn; and from "fever" in Sunderland. The 35 deaths from diphtheria in the twenty-eight towns included 21 in London, 7 in Manchester, and 3 in Salford. No death from small-pox was registered in any of the twenty-eight great towns; and no small-pox patient was under treatment during the week in the Metropolitan Asylum Hospitals, and only two in the Highgate Small-pox Hospital. The number of scarlet-fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 693, against numbers declining in the preceding eight weeks from 980 to 742; 41 new cases were admitted during the week, the numbers in the previous two weeks having been 44 and 60. The deaths referred to diseases of the respiratory organs in London, which had been 412 and 484 in the previous two weeks, further rose last week to 652, and exceeded the corrected average by 106. The causes of 113, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Newcastle-upon-Tyne, Sunderland, Portsmouth, and in four

other smaller towns. The largest proportions of uncertified deaths were registered in Liverpool, Halifax, Hull, and Cardiff.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased in the preceding four weeks from 19·3 to 23·6, further rose to 24·1 in the week ending Jan. 12th; this rate was, however, 1·4 below the mean rate in the twenty-eight large English towns. The rates in these Scotch towns ranged from 12·9 in Leith and 19·0 in Perth, to 25·9 in Greenock and 28·9 in Glasgow. The 617 deaths in the eight towns showed a further increase of 13 upon the numbers returned in recent weeks, and included 17 which were referred to whooping-cough, 15 to measles, 11 to diphtheria, 10 to diarrhœa, 6 to scarlet fever, 5 to "fever" (principally enteric), and 1 to small-pox; in all, 65 deaths resulted from these principal zymotic diseases, against 60 and 50 in the preceding two weeks. These 65 deaths were equal to an annual rate of 2·5 per 1000, which was 1·0 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of measles, which had been 13 in each of the preceding two weeks, rose last week to 17, and included 12 in Glasgow and 5 in Greenock. The deaths from whooping-cough were within one of the number in the previous week; 12 occurred in Glasgow and 2 in Edinburgh. The deaths from diphtheria, which had been 16 and 6 in the previous two weeks, rose again last week to 11, and included 6 in Edinburgh and 3 in Glasgow. The 10 deaths attributed to diarrhœa showed an increase upon recent weekly numbers. The 6 fatal cases of scarlet fever, all of which occurred in Glasgow, exceeded the number in the previous week; and the 5 deaths from "fever" included 2 in Glasgow. The fatal case of small-pox was returned in Dundee. The deaths referred to the principal diseases of the respiratory organs, which had been 95 and 140 in the previous two weeks, further rose last week to 146, but were 13 below the number returned in the corresponding week of last year. The causes of 87, or more than 14 per cent., of the deaths registered during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 21·3 and 31·3 per 1000 in the preceding two weeks, declined again to 30·2 in the week ending Jan. 12th. During the thirteen weeks of last quarter the death-rate in the city averaged 24·8 per 1000, the mean rate during the same period being 18·8 in London and 15·5 in Edinburgh. The 204 deaths in Dublin showed a decline of 8 from the number in the previous week; they included 4 which were referred to "fever" (typhus, enteric, or ill-defined), 3 to scarlet fever, 3 to measles, 3 to whooping-cough, 3 to diarrhœa, and not one either to small-pox or diphtheria. Thus the deaths from these principal zymotic diseases, which had declined in the preceding four weeks from 19 to 12, rose again last week to 16; they were equal to an annual rate of 1·8 per 1000, the rate from the same diseases being 3·3 in London and 1·8 in Edinburgh. The 4 fatal cases of "fever" were fewer by one than the number returned in each of the preceding three weeks, and the deaths from whooping-cough also showed a decline; the deaths from measles, scarlet fever, and diarrhœa, on the other hand, showed an increase. Six inquest cases and 6 deaths from violence were registered; and 53, or more than a quarter, of the deaths occurred in public institutions. The causes of 21, or more than 10 per cent., of the deaths in the city were not certified.

WINTERBOURNE WATER-SUPPLY.—Mr. A. Taylor, a Local Government Board Inspector, has just held an inquiry in this town, in reference to the water-supply of the parish. The inquiry was the result of a correspondence which had passed between the sanitary authority and the central authority, and Mr. C. Pauli, relative to the supply of water at Hicks Common Farm, of which that gentleman was the owner, who had made, *inter alia*, objections on the ground that the supply was not required. After a patient inquiry into the matter, the inspector, with the local officials, visited the farmhouse, and promised to report to the Local Government Board.

Correspondence.

"Audi alteram partem."

"INACCURACIES ABOUT VACCINATION."

To the Editors of THE LANCET.

SIRS,—My attention has recently been drawn to the following sentence in the article on Vaccination in the "Encyclopædia Britannica" "But nurses are not really chosen from among those who have had small-pox, and cases of small-pox in revaccinated nurses are not unknown (Sweeting, Report, Fulham Hospital, 1881)."

With your permission, I will quote *in extenso* the part of my 1881 report headed "Revaccination: immunity of the staff from the disease," so that it may be seen what use Dr. Creighton has made of it. The report runs thus: "During the year, sixty-nine fresh members of the staff were engaged, all of whom were revaccinated before going on duty; four of these had previously suffered from small-pox, including two nurses. Not a single case of the disease occurred amongst them, although the total number of the staff at one time numbered eighty; and that this was due to revaccination, and not insusceptibility to fever, is shown by the fact that ten of them took scarlet fever, as before shown. It might also be useful to give here the statistics of the incidence of small-pox upon the staff since the institution of the hospital. These are as follows:—(*a*) Total number of staff engaged, 295; (*b*) number of those who had previously had small-pox, 42; (*c*) number of those who took small-pox, 5 (4 of these 5 had been revaccinated). The disease in all was very mild and the recovery rapid." If Dr. Creighton considers 2 nurses out of a total of 69 staff as a large proportion, he is welcome to his belief; or if he reckons 42 out of 295, or 1 in 7, as a large percentage, by all means let him claim it as such. But I doubt whether he will find many to agree with him.

Again, as to small-pox in "revaccinated nurses," the report does not specify *nurses* at all. As a matter of fact, the four cases mentioned were members of the domestic staff not employed in the wards. If Dr. Creighton had taken the trouble to consult the two previous reports of this hospital and a memorandum on vaccination published in 1882, where the question is treated more fully and for all the hospitals of the Asylums Board, he would perhaps not have hazarded such a statement. Further, in at least two of these four instances, the revaccination was unsuccessful; I cannot speak as to this point in the others, inasmuch as they occurred in my predecessor's time. The "not unknown" occurrence is therefore whittled down to two cases out of a total staff of 253 liable to attack, a proportion of less than 1 per cent. I have before said that these cases "may perhaps be considered as furnishing in themselves a refutation of the point sought to be established; but those who do so must bear in mind, in the first place, that the immunity contended for is not asserted to be mathematical in its precision, and next that vaccination and its corollary revaccination claim to do no more than small-pox itself does. And that this repeats itself in the same subject is well known. Two hundred such cases were reported to the Epidemiological Society in 1851." (Memorandum of 1882.)—Your obedient servant,

R. D. R. SWEETING,
Medical Superintendent, Western (late Fulham) Hospital.
Jan. 15th, 1889.

To the Editors of THE LANCET.

SIRS,—Would Dr. Creighton like another "Inaccuracy about Vaccination"? Here is an example:—

"Infantile Death-rate from Syphilis (England and Wales)" is the heading of a table where the figures

591	and	373	occur	against the year	1854
1089	,,	461	,,	,,	1864
1484	,,	513	,,	,,	1874
and 1733	,,	547	,,	,,	1884

These and other figures, given as death-*rates*, are the *actual deaths* registered during a period when the population was increasing from 18,616,310 to 27,132,449.

I am sorry for the stereotyper of Dr. Creighton's article, but my personal sympathy is with Dr. Creighton's

Jan. 12th, 1889. READER.

"IS INSTRUMENTAL DELIVERY A CAUSE OF IDIOCY."

To the Editors of THE LANCET.

SIRS,—My attention has been called to a paper by Drs. Winkler and Bollaan on the Forceps as a Cause of Idiocy. The importance which it has received by a reference to it in your columns leads me to call the attention of the profession to what I wrote in a paper entitled the "Obstetrical Aspects of Idiocy," published in the Obstetrical Society's Transactions, 1876. "I find, from an examination of all my cases of idiocy about which positive information could be obtained, that in only 3 per cent. were the forceps employed. In every case, however, where they had been employed, the friends of the child believed that the instrument alone was the cause of the disaster, while in nearly every case I could discover quite sufficient to account for the mental defect in the neurotic history of the progenitors. In a very few cases, only a small fractional percentage, could I arrive at the conclusion that the use of the forceps was the principal cause of the calamity. I find in a very large number of my cases that the labour was stated to be unusually tedious and prolonged. Dr. Playfair has shown that the employment of the forceps does not interfere with the viability of the offspring; and that a prolonged labour is more compromising to the life prospects of the child than a judicious and timely application of the forceps. "When it is borne in mind how frequent is the association of suspended animation with idiocy, it cannot, I think, be too strongly enforced that the mental integrity of the child is more likely to be compromised by a prolonged pressure in the maternal passages than by skilled employment of artificial assistance. The accoucheur who postpones instrumental help often does so at the risk of terrible consequences to the nervous system of the little one he is solicitous to protect." In my somewhat recent Lettsomian lectures delivered before the Medical Society of London I was able to confirm by additional experience that which I had so strongly enforced before. I am convinced that injury is likely to result from a reception of Drs. Winkler and Bollaan's teaching. I am, Sirs, yours faithfully,

Harley-street, W., Jan. 12th, 1889. J. LANGDON DOWN.

"ALBUMINURIA IN PHTHISIS AND ALPINE WINTER CLIMATES."

To the Editors of THE LANCET.

SIRS,—On my return from a Christmas visit to the Grisons, I found in THE LANCET of Jan. 5th, 1889, an interesting communication from Sir Andrew Clark entitled "The Peril incurred in Alpine Winter Climates of Renal Complications in Phthisis," in which complimentary allusion is made to my paper on "The Treatment of Consumption by Residence at High Altitudes," published in vol. lxxi. of the Medico-Chirurgical Transactions. I am very glad to have from Sir Andrew Clark's large experience such important confirmation of most of my conclusions, and I much regret that he was prevented from being present at the discussion which followed the reading of the paper. Sir Andrew Clark draws attention to "a remarkable and inexplicable omission in both paper and discussion"—viz., that no notice is taken of the peril of sending cases of phthisis complicated with albuminuria to high altitudes. My answer to this is simple. I have never counselled sending such patients to high altitudes; and whenever I have been consulted in such cases, have done my best to deter them from going; but to warn medical men against what appeared to me obvious—viz., the inadvisability of sending these cases—has hitherto seemed to me unnecessary. Now, when does albuminuria intervene in phthisis? Generally within a few months or weeks of the patient's death, except in the fibroid form, when it may appear earlier. It surely would be a doubtful proceeding to send to a high altitude Alpine station an advanced case of phthisis, with a necessarily small area of breathing space, and in whom the intropulsive action of a cold climate would tend to produce congestion of internal organs, including the kidneys. In the fibroid variety of phthisis, especially if the amount of induration is large, as Sir Andrew Clark says truly, albumen does sooner or later make its appearance; but this is a class of cases which I exclude in my paper under the heading of "Cases of Phthisis where the Pulmonary Area at Low Levels hardly suffices for Respiratory Purposes." This does not apply to all cases of phthisis where fibrosis is present, but only where the changes so well described by Sir Andrew Clark are the chief feature. Therefore, while cordially endorsing the proposition that no cases of phthisis and albuminuria should ever be sent to high altitudes, I have thought this too self-evident to require formulation. I wish any readers of THE LANCET who may be sceptical as to the benefits of the high altitude treatment of phthisis could witness, as I did recently at Davos and St. Moritz, the weather-tanned consumptives pursuing their vigorous and enjoyable life in the clear buoyant diathermic climate, free from fog and wind, and rejoicing in sunshine and brightness. Owing to the early and comparatively small amount of snowfall, the lakes of Davos, St. Moritz, Silvaplana, and Sils formed splendid sheets of dark ice free from snow, and capital for skating and picnics. The recent fall of snow has ended most of the lake skating, but the rinks and toboggan runs are in full swing. The weather has been magnificent for sleighing excursions, and the whole outdoor life at high altitudes has been carried out under exceptionally favourable conditions, and I was pleased to find that the patients had improved accordingly.

If any of your readers should desire a copy of the above-mentioned paper, which gives the results of this treatment in 141 cases of consumption, I shall have great pleasure in forwarding it to them.

I am, Sirs, faithfully yours,

C. THEODORE WILLIAMS, M.A., M.D., F.R.C.P.

January, 1889.

"MEASLES AND ELEMENTARY SCHOOL CLOSURE."

To the Editors of THE LANCET.

SIRS,—I note in a recent issue of THE LANCET these words: "It is very desirable that the matter [closure of schools for measles] should be carefully studied." Will you allow me to add, the closure of schools for any epidemic disease? I send you some information on the subject, gained by myself as a member of a School Board having under its control eighteen blocks of school buildings, with an average attendance of 7800 children, for publication if you consider it of any value. It is important to note that in Burton the notification of infectious disease is compulsory, and that of the two diseases with which elementary schools are most concerned—scarlet fever and measles—the former is scheduled and the latter is not.

Scarlet fever.—By the courtesy of the sanitary authority, the clerk to the School Board obtains returns of the cases notified, and sends a list of all such cases as may affect the elementary schools to the various head teachers. As a result of this arrangement, the Board becomes aware of the existence of an epidemic of scarlet fever before it has time to influence the school attendance, and is enabled to take measures to prevent the spread of the disease, such as the exclusion of all children from infected houses and the regulation of the return of convalescent children.

Schools not closed for scarlet fever.—It has been the practice of our Board, with the concurrence of my colleague, Dr. W. G. Lowe, and myself, not to close schools during an epidemic of scarlet fever, believing that to close the school where the first cases appear simply has the effect of spreading the epidemic throughout the district. And, as a matter of fact, two epidemics which have occurred in the school district during the past five years have practically been confined, in each instance, to a small portion of the town, and have at the most affected only two blocks of schools.

In measles schools closed early.—Experience has taught us that, in dealing with measles, the sooner we close a school or schools where the disease is rife (and here note that we have no means of knowing of the existence of measles until it affects the school attendance), the sooner the disease is stamped out, and the less the school attendance, in the long run, suffers.

Effect of closing for a month.—The following figures will give some idea of the effect of closing schools on account of the existence of measles. A block of schools with accommodation for 1000 scholars had its average attendance reduced to about 75 per cent., and was closed for a month. The schools opened at the end of that time with an attendance of 88 per cent. in the boys and girls' department, and 68 in

the infants', and the attendance continued good. In another block of schools, with accommodation for 700 scholars, the attendance being reduced to under 75 per cent. by measles, the schools were closed for a month, and then opened with an average attendance of 86 per cent. Other instances would show similar results.

Length of closure.—We have always found that, to be effective, a closure for measles must last three weeks at least, and usually a month.

Duty of visiting officers.—During the time of closure the visiting officers of the Board make a point of finding out as far as possible every house in which measles exists or has existed, in order to regulate the return of the convalescent children. No child is allowed to return from an infected house until a full fortnight has elapsed from the commencement of the last case.

Sunday schools.—It is certainly of no use to close day schools unless the Sunday schools are also closed, and here we have always met with ready help from the managers in this matter. Sunday schools collect their scholars according to religious belief, and not according to location, and consequently they not only spread infectious disease, but they also tend to scatter it to previously untainted districts of a town. I have met with several very clear instances of this.

Sanitary authority and the schools.—Without doubt the real interests of the schools are identical with the interests of sound sanitation, and the best results will be obtained where the sanitary authority and the school authority, recognising this, work together. Here our School Board has never waited for the interference of the sanitary authority, but at the same time it has always been able to obtain the valuable help of the medical officer of health in its endeavours to check the spread of epidemic disease.

I remain, Sirs, yours truly,

Burton-on-Trent, Dec. 26th, 1888. HENRY E. BRIDGMAN.

"THE RELATION OF CHOREA TO RHEUMATISM."

To the Editors of THE LANCET.

SIRS,—In last week's discussion upon this subject at the Royal Medical and Chirurgical Society, I mentioned the infrequency of chorea preceding rheumatism, contending that the rare instances where the two affections occurred in that sequence were probably all recognised, inasmuch as it could not be said of the chorea, as is well said of the rheumatism, that it was likely to escape notice. While quoting the general testimony of writers to this effect, I neglected, in the hurry of the moment, to add a specific illustration. It is this. In the recent report upon rheumatism by the Collective Investigation Committee, prepared by Dr. Whipham, chorea preceded in only 15 out of 655 cases—that is, in less than 2 per cent.

I should not have troubled you to supply this omission were it not for the remarkable rejoinder of Dr. Stephen Mackenzie later in the discussion, that chorea was unnoticed in the literature of rheumatism only because it is assumed to be one of the manifestations of that disease, not needing separate mention. Dr. Whipham's report negatives that contention; and we are in this dilemma: either clinical statistics of this kind are not trustworthy, in which case the whole discussion goes by the board; or else the connexion between chorea and rheumatism, which no one denies, is less intimate than some physicians contend.

I am, Sirs, yours faithfully,

Wimpole-street Jan. 14th, 1889. OCTAVIUS STURGES.

MR. CHAVASSE ON INGUINAL OR SIGMOID COLOTOMY.

To the Editors of THE LANCET.

SIRS,—It is really very gratifying to me to find that Mr. Chavasse, in his lecture in your issue of Jan. 5th, has followed out in almost every detail the new points in the operation of inguinal colotomy first described by me in a paper read before the British Medical Association in 1887. Prior to the appearance of my paper the inguinal operation had been somewhat in abeyance on account of the bad results which followed the procedure of opening the peritoneum, treating it in a haphazard way, and immediately opening the gut. Latterly, however, the operation has been frequently performed on my lines with such success as to bring it into considerable favour. There are several points in Mr. Chavasse's paper which I think cannot be allowed to pass without comment.

1. Mr. Chavasse says, in speaking about the manner in which the gut should be secured to the wound: "That will depend on whether the malignant growth is causing complete obstruction or not. If so, then on each side three interrupted carbolic silk ligatures passed through the peritoneal and muscular coats of the bowel, and secured to the edges of the parietal peritoneum and skin incisions, will suffice. Should the obstruction not be complete, it is better to attempt to form a spur." In my opinion, in all cases it is absolutely of the utmost importance to make a good "spur," and, if possible, more necessary when the obstruction is complete, and for this reason: when no spur is formed, the motion constantly passes beyond the opening in the groin into the part of the rectum below, and sets up great irritation, tenesmus, and pain by its contact with the malignant growth; and if the obstruction be not complete, this may be washed away by syringing from the anus and from the groin wound; but if it be complete, you cannot wash through from the anus, nor can you wash away the accumulated fæces from the cul-de-sac formed between the inguinal opening and the growth.

2. Mr. Chavasse passes a piece of silver wire through the two outer coats about the middle of the gut, to act as a guide in the second stage of the operation, and so prevent passing the knife through the posterior wall of the gut. I am quite at a loss to see the utility of this, for if the operation has been properly performed there is amply sufficient when drawn out of the wound to prevent the posterior wall being injured by the knife; and, further, if such a blunder were committed, no harm would accrue, as the posterior wall of that part of the gut to be opened should be outside the abdomen.

3. Under the heading of the advantages of the operation, Mr Chavasse says "it is readily performed," and then proceeds to cite a case in which, the patient's abdomen being very distended, he opened the colon in the iliac region. Now, from my experience, this is one of the class of cases for which inguinal colotomy should not be performed; for when the abdomen is distended it is next to impossible to bring the parietal peritoneum to the skin and firmly suture it. From the distended condition of the gut it is necessary to open it at once, and there is great likelihood of fæces and gas escaping into the peritoneal cavity; moreover, the safety resulting from performing the operation in two stages is lost. When the large intestine is greatly distended there is usually no difficulty in finding it in the loin; and, as Mr. Bond of Leicester has pointed out, it is then that the colon is more likely to be opened on its non-peritoneal surface. Mr. Chavasse is of opinion that the tendency for the gut to prolapse is greater after lumbar than inguinal colotomy. In this I am not in accord with him; and I have just written a paper, which will be published shortly, dealing with this unfortunate and disagreeable result of some of the inguinal operations.

I am, Sirs, yours obediently,

HERBERT WM. ALLINGHAM.

Grosvenor-street, W., Jan. 14th, 1889.

GENERAL PARALYSIS OF THE INSANE IN GENERAL HOSPITALS.

To the Editors of THE LANCET.

SIRS,—I need not at any length occupy your valuable space with my reply to Dr. Handford's letter. I am not surprised that he should differ with me in opinion about a disease varying so much in its methods of onset and so very difficult to diagnose in its earliest stage as general paralysis. It is not, however, necessary that I should enter upon this question, or do more at present than ask those of your readers who may be interested in the subject under discussion to read for themselves, with that rigid attention and care which Dr. Handford complains I have not bestowed upon them, the accounts of cases described as general paralysis by him in THE LANCET of December 15th last, and to form their own opinion upon the desirability or otherwise of treating such cases as present grave mental symptoms longer than can be helped in the wards of a general hospital. It was hardly necessary for Dr. Hand-

ford to take so much trouble, or to quote authorities, to prove that general paralysis is not a curable disease; every tyro in asylum work knows that it is not, but every alienist physician also knows that not unfrequently, under favourable conditions, "arrest" or "remission" of the disease takes place. If, therefore, by the instrumentality of sufficiently early diagnosis, early treatment, and individual care, systematically carried out, such "arrest" or "remission" can be favoured or actually induced, which I believe they can be at an early stage of the disease, and before the brain and its coverings are thoroughly disorganised by disease, prolonged as such arrests or remissions sometimes are, they form in many cases a very good and useful substitute for a cure.

Dr. Handford is probably aware that recently a prolonged correspondence took place in the columns of *The Times* as to the desirability of treating all cases of recent insanity in ordinary hospitals. There were those who maintained this view strongly; others, who knew intimately the working of asylums equally or more strongly, held the opposite opinion, and did not consider the ordinary hospital scheme practicable.

The remark at the conclusion of my letter, "with all deference to those who advocate ordinary hospital treatment in all cases of mental disorder," had reference only to the opinions of the former gentlemen, and not in any respect to those of Dr. Handford.

I am, Sirs, your obedient servant,

West Malling, Kent, Jan. 12th, 1889. JAMES ADAM, M.D.

DENTAL EDUCATION AND GENERAL HOSPITALS.

To the Editors of THE LANCET.

SIRS,—Will you allow me to correct an impression conveyed by your annotation in last week's journal that the establishment of a dental school in connexion with Guy's Hospital will involve a burden upon the funds of that institution? This will not be the case, for no part of the expense of maintaining the dental school will fall upon the hospital exchequer, and the preparatory arrangements for an out-patient department are not likely to involve a serious outlay. Whilst I would not for a moment disparage the work done at St. Bartholomew's, it is obvious that it would require a very numerous dental staff to afford the requisite skilled labour to meet the needs of a general hospital if dental cases are to receive treatment at their hands. With reference to the fact that the diploma of Licentiate in Dental Surgery conferred by the Royal College of Surgeons of England qualifies candidates to apply for the vacant appointments of assistant dental surgeons to Guy's Hospital, some further information may be offered. It would certainly be desirable that clinical teachers in a general hospital should be members of the medical profession, and applications from gentlemen possessing surgical qualifications will be welcomed. But in my own opinion it would not be possible at the present date to obtain a sufficiently numerous assistant dental staff composed exclusively of surgeons who were also expert demonstrators of the more elaborate operations of dental surgery. By the present system of education the difficulties thrown in the way of a dental student desiring a medical qualification are so great that the practical work of the dentist has too often been sacrificed to the exigencies of medical study. The complete training of dental surgeons in medical schools will facilitate their special and general studies, especially if the proposal be adopted that dental and medical students alike shall pass the same first two examinations of the Conjoint Board, and at this point the dental student shall branch off to his special final examination completing the curriculum for the conjoint examination if he desires a medical qualification in addition to the L.D.S. Meanwhile, it seems essential that clinical teachers of dental surgery should, above all, be expert operators and men of the highest manipulative skill. In a few years, there will be no difficulty in finding duly qualified men to fill vacancies on a dental staff, whose attainments will secure the confidence both of the medical and dental professions.

I am, Sirs, yours obediently,

F. NEWLAND-PEDLEY, F.R.C.S., L.D.S.

Devonshire-place, Jan. 16th, 1889.

"ON THE DIAGNOSTIC VALUE OF 'BALLOONING OF THE RECTUM' IN CASES OF STRICTURE OF THE BOWEL."

To the Editors of THE LANCET.

SIRS,—The instructive remarks of Mr. Bryant on the above subject in THE LANCET of the 5th inst. recall to me a case which may be of interest. In the summer of 1886, while acting as locum tenens, I was called in to see an aged lady who was suffering from constipation. There was a history of habitual constipation and painful defecation over a considerable period. With the help, however, of cascara as a daily medicine and enemata at intervals, the bowels had been kept fairly regular. On the occasion of my visit she was in great distress. There was an intense desire to pass something, and at the same time an utter inability to do so. This desire was so persistent, and she was so convinced of something being there, that I examined the rectum. The sphincter was firmly contracted, and, on passing the finger through, the condition that Mr. Bryant describes as "ballooning of the rectum" was found. There was a cavity in which the finger could be moved freely without coming in contact with the mucous membrane of the rectum. Nothing else was made out but this "ballooning," which existed higher than the finger could reach. An enema was ordered, and the patient was told that no substance could be felt, but if there was anything higher up the enema would very likely bring it away. About three hours afterwards, there being no alleviation of the symptoms, a second examination was made. The same "ballooning" was found, and in addition there was felt projecting into the centre of the cavity, a pointed, hardened mass of fæces. This was removed by copiously syringing the rectum and by manipulation. Some hours afterwards other hardened masses, of the small size, came away naturally. The subsequent history of the case I am not acquainted with; but I learned from the medical gentleman for whom I had acted that this state of matters had threatened before, but was warded off without having had recourse to treatment, which would have revealed the condition of the rectum. With reference to Mr. Bryant's statement that the "ballooning" is caused by retained flatus, I may mention that in the case referred to I used a speculum while syringing out the rectum, and on subsequent examination the same "ballooning" was observed, and at this time the hardened mass could only just be reached by the finger. I am, Sirs, yours faithfully,

Upton-park, Essex, Jan. 7th, 1889. D. DURRAN, M.B.

BIRMINGHAM.

(*From our own Correspondent.*)

OVERCOATS.

THE discussion on the use of overcoats has been the occasion of drawing attention to the prevalence of colds at this season. No one seems inclined to raise an issue with THE LANCET on the subject, but, from their own experience, are tempted more to deplore the vicissitudes of the climate in which we live. This may be considered a safer line of debate, and, as the arguments are mostly on one side, the weather may still continue to be abused with impunity. Charles Lamb once attempted to defend the climate upon which we are so much dependent by drawing a contrast with the discomforts so frequent in torrid zones. The picture was a highly coloured one, but it requires more than a philosopher to reconcile us to the fogs, the vapours, the damp and drizzle which have attended our movements for some weeks past. There is some comfort in knowing that a good part of the winter period is past, and that we may reasonably hope for some speedy improvement in the shape of sunlight and a clear sky.

BURNS AND SCALDS.

There are internal dangers as well as external discomforts associated with the season. The number of cases of burns and scalds, chiefly among children, has lately been above the average. The hospital records show how frequently

these cases are admitted; while almost daily inquests point to the oft-repeated warning, that the absence of fire-guards in small houses becomes a constant source of danger where there are children. Sins of omission as well as of commission by repetition appear to induce a familiarity which breeds contempt of precautions, and thus the sacrifice becomes an occurrence of which too little heed is taken.

THE NEW WORKHOUSE INFIRMARY.

The remarks made by THE LANCET as to the administration of the medical duties and the large number of patients to be accommodated in the new building do not appear to have been refuted by logical reasoning, the facts still remaining the same. The chairman of the board of guardians at the opening ceremony gave a lunch to some 300 guests, and much interest was exhibited in the various parts of the vast undertaking under their control. The result of such a great responsibility can only be proved by time; and it must be hoped that the energy which has been displayed in the production of a building of almost unequalled extent for such purposes will still attend the organisation of the multifarious departments connected with it. A determined effort to meet the management in a broad and generous spirit will be the best safeguard against adverse criticism.

Birmingham, Jan. 16th

LIVERPOOL.

(From our own Correspondent.)

HOSPITAL SUNDAY: THE NINETEENTH ANNIVERSARY IN LIVERPOOL.

HOSPITAL SUNDAY has again come and gone, and the next anniversary will witness the completion of the second decade of its history in Liverpool. It would be premature at present to predict whether the result will be in excess or below that of last year, the amounts of the various collections being in some cases more, in others less. Some of the collections have, as in former years, been truly munificent. Thus, at the Sefton Presbyterian Church, of which the Rev. John Watson (one of the honorary secretaries of the fund) is incumbent, the collection amounted to £581. One Unitarian chapel contributed £533, and amounts comprising "three figures" keep coming in. The treasurer has been already advised of over three thousand pounds, and it is hoped that there will be an increase over the total of last year.

INQUESTS IN PUBLIC HOUSES.

At a recent inquest held upon the body of a boy at Waterloo, the jury suggested that in future inquests should be held in the Town-hall or police station rather than as heretofore in public houses. The police inspector stated that there was no room at the station large enough to accommodate the coroner and jury, but it was intimated that the Town-hall might be obtained. Waterloo, which commenced in 1815 as a watering-place named after the famous battle of that year, has risen from a small village to a town of some size, and there ought to be no difficulty in complying with this very reasonable suggestion.

DR. ROGERS AND HIS PENSION.

The remarks contained in THE LANCET last week express the feelings of most of the local practitioners among whom Dr. Rogers is held in very high esteem. Though the proposed pension of £800 was a liberal one, it was felt to be no more than was fairly due to Dr. Rogers for his long services, his admirable administration combined with every reasonable economy resulting in the efficient state in which the asylum has always been maintained.

THE MORTUARY QUESTION.

The conflict between the local authorities as to the burial of unclaimed bodies taken to the mortuary from parishes beyond that of the parish of Liverpool, in which the mortuary is situated, will, it is hoped, soon be terminated satisfactorily. The notice in THE LANCET of last week was reproduced in two local papers, and several papers have leading articles referring to the matter. When the question is decided it is greatly to be wished that the improvement, if not the re-erection, of the present mortuary may be at once commenced. Liverpool has reason to be proud of most of its public buildings, which are pleasing to the eye as well as complete internally with all the most recent improvements. This mortuary is neither: it has long been the subject of complaint. From time to time efforts have been made to effect an improvement, but with no satisfactory result.

Liverpool, Jan. 15th.

EDINBURGH.

(From our own Correspondent.)

SALT WATER FOR EDINBURGH.

THE question of the Edinburgh fresh-water supply has brought to the front a long mooted project for the supply of the city with salt water. Mr. Skinner, the town clerk, has sent a letter to the Edinburgh and District Water Trust, in which he intimates that the magistrates and Council have under their consideration a plan for the introduction of salt water into the city for watering and cleansing purposes, and for sale in the hotels and private houses. The Baths Sub-committee, who have been collecting information on the subject, are now anxious to know whether the Water Trust will take up the subject, and, if not, whether, in the event of the magistrates and Council resolving to apply for the necessary Parliamentary powers, any opposition would be offered to their application. It was explained at a meeting of the Water Trust that a large number of the English seaport towns are now using salt water, and that all these recommended its adoption. It can be introduced at a cheaper rate than can fresh water, and could be taken for four hours at least at each tide from Granton. According to one of the best engineers in the city, who has gone into the matter thoroughly, it could be brought into Edinburgh at a cost of twopence per thousand gallons. To those who delight in salt-water bathing all the year round, the prospect of a salt-water bath not artificially prepared is, indeed, one not to be lightly abandoned. It is to be hoped that the matter may be thoroughly threshed out. Edinburgh is some distance from the Forth, but there seem to be no obstacles which could not be readily surmounted.

COOKERY FOR MEDICAL STUDENTS.

On Saturday last the large theatre of the Royal Infirmary was made the scene of extensive cooking operations by the ladies connected with the Edinburgh School of Cookery and Domestic Economy, who gave to a very large number of senior medical students a demonstration on sick-room cookery. These demonstrations have now been given annually for some time, and have from the first proved an unqualified success. There are four demonstrations in each course, in which are explained and illustrated the principles and practice of the preparation of digestible and palatable invalid food. I understand that the present professor of surgery, Mr. Chiene, was the first to introduce these lessons in cookery into his class; now, however, the work is done on a much more extensive scale, and the demonstrations are open to all senior students of medicine.

HALFPENNY DINNERS FOR CHILDREN.

Last winter a scheme was set on foot for supplying halfpenny dinners to children attending school. This was so successful that it has now been decided to continue the supply during the present winter season. On Monday afternoon the first of the new series of dinners was served in the Heriot School in Old Assembly-close to about 200 poor children. It is the experience of all Board school teachers that the very poor children are always better able to answer questions in their work when they are moderately well fed than when they are half starving. Although the charge for a good substantial dinner is only one halfpenny, a sum which brings it within the reach of all but the very poorest, the scheme is intended to be entirely self-supporting.

LONGEVITY.

A correspondent writing to the *Scotsman* draws attention to the large proportion of old people whose deaths are announced in the obituary column of that paper. On one day there were no less than thirteen deaths out of twenty-nine recorded, the total number of whose years amounted to a thousand and sixty-four, giving an average of eighty-two years. The writer concludes that temperance and improved

sanitation are having their effect in helping us to live longer, and that some day Bucher's prophecy that a man will be ashamed to die under a hundred will be fulfilled.

Edinburgh, Jan. 15th.

ABERDEEN.

(From our own Correspondent.)

HEALTH OF THE CITY.

AT a meeting of the Public Health Committee, held on the 9th inst., it was reported that the number of cases of zymotic diseases in the city during December was 82, of which 20 were cases of measles, 13 of scarlet fever, 5 of typhoid fever, and 42 of whooping-cough. The death-rate was 18·99 per 1000, which was higher than that for November, but less than that for the corresponding month of 1887, when it was 22·08. Scarlet fever is on the decline, but, unfortunately, the outbreak of measles is gaining ground, and the disease may now be said to be epidemic. It broke out in, and so far is confined to, the west end of the city, and the sanitary authorities have ordered an infants' school and two Sunday schools in that quarter to be closed. At the end of December there were 15 patients in the City Hospital, no death had occurred, and 11 patients had been discharged during the month. The fees to be paid to medical men for reporting cases of zymotic disease during the past six months amount to £27 14*s.*, which is said to be the smallest sum paid for the same period since compulsory notification was adopted. On one occasion one practitioner alone received about £50 for the cases he had reported during a period of six months. At that time a fee of 2*s.* 6*d.* was paid for each case reported, but now the same fee is paid only for the first case in a family, and 1*s.* for each case occurring in the same family within six weeks after the first was reported.

DEATH OF PROFESSOR BRAZIER.

Professor Brazier, who for twenty-six years held the chair of Chemistry in the Aberdeen University, died yesterday of heart disease, at the age of sixty-four. In February last, during his usual afternoon lecture, he suddenly broke down, and was never able to resume work. For some time before that date his health was failing, and in the following July he resigned the chair, and was granted a full retiring allowance. Professor Brazier first came to Aberdeen in 1852 as assistant to Dr. Clark, who was then professor of chemistry. He afterwards held the same appointment under Dr. Fyfe, who died in 1861, and in April following Mr. Brazier was appointed to the chair. For many years he held the office of secretary to the Medical Faculty, and on the resignation of the late Professor Ogston he was elected Dean of the Faculty as well. The duties of those offices he performed admirably, and many students and graduates of the University will have pleasant recollections of the kindly manner in which he invariably received them when they went to him for information or advice. No professor ever had the interests of students and the University more at heart, and no professor was ever more loved and respected. If not a brilliant lecturer, Professor Brazier was an excellent teacher, and as an experimenter he had no rival. In October last year, Professor Carnelly, University College, Dundee, was elected by the University Court as successor to Professor Brazier in the chair of Chemistry.

COTTAGE HOSPITAL FOR FORRES.

Some time ago an anonymous gift of £5000 was made to Forres to provide a cottage hospital for the district. The same munificent donor has intimated his willingness to contribute £3000 more on condition that an equal sum is provided by public subscription; and in the letter intimating this further donation was a cheque for £238 15*s.*, the sum paid for the site chosen for the hospital. The public subscriptions already amount to nearly £2800.

Aberdeen, Jan. 15th.

LINCOLN COUNTY HOSPITAL.—At the annual meeting of the governors of the Lincoln County Hospital, the year's revenue was stated to be £4627 1*s.* 11*d.* and the expenditure £4727 5*s.* 10*d.*, or a deficiency of only £100 3*s.* 11*d.* The surveyor reported that the house generally was in a satisfactory condition.

IRELAND.

(From our own Correspondent.)

DUBLIN.

PROPOSED AMALGAMATION OF THE DUBLIN MEDICAL SCHOOLS.

IT is currently reported that the solitary dissentient to the scheme has stated the conditions under which he will withdraw his opposition to amalgamation. They appear to consist of the continuance of the night lectures for at least seven years; that Messrs. Falkiner, Lentaigne, and Broomfield be restored to their former posts of night lecturers; and lastly, that should the gentleman in question at any time become dissatisfied with the arrangements, he shall be entitled to withdraw from the scheme.

BRITISH MEDICAL ASSOCIATION: DUBLIN BRANCH.

The twelfth annual general meeting of the members of the Dublin branch will be held in the College of Physicians on the 30th inst., when the officers and council for the ensuing year will be elected, and any other necessary business transacted. The president-elect, Dr. William Moore, physician to Her Majesty in Ireland, will deliver the annual address. At this meeting an address will be presented to Dr. Mapother, the outgoing president of the branch, on the occasion of his leaving Dublin to reside in London.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

In vol. vi. of the Transactions there are in the Pathological Section some communications which will repay perusal. Among them may be mentioned a case of phlegmasia dolens, by Professor Bennett, and details of a case of rupture of the trachea with fracture of the sternum and ribs, by the same observer; a case of cerebral hæmorrhage, by Dr. Little, where paralysis was absent, although the quantity of blood extravasated was considerable; pyæmia of dental origin, by Mr. Baker; locomotor ataxy, by Dr. Magee Finny; and separation of the coracoid epiphysis of the scapula, by Professor Bennett.

COUNTY CLARE INFIRMARY.

An election for a surgeon to this infirmary will take place this week. The emoluments of the post are not to exceed £94 a year, with a residence.

Mrs. Jacob has left £50 to the Dublin Orthopædic Hospital. Mrs. Walsh has bequeathed £400 to Jervis-street Hospital.

Dublin, Jan. 15th.

PARIS.

(From our own Correspondent.)

PROFESSOR SÉE ON HEART DISEASES.

IN resuming his winter course of lectures on Clinical Medicine, M. Germain Sée commenced by a general review of the diseases of the heart. Diseases of the heart, said the Professor, are not distinct from one another. It is the same affection presenting itself under different aspects, and offering different types. Whether the case be one of subacute or acute endocarditis, ulcerative or vegetating, the disease is always parasitic, and this view leads to a no less revolutionary deduction, that of the negation of their inflammatory nature. Under the latent, and sometimes the remote, influence of a specific disease, especially of articular or choreic rheumatism, the endocardium is exposed to the action of the microbe, easily defined in this part, although not so readily recognised in the joints. At other times the cause is a typhoid fever, or an attack of diphtheria long forgotten, scarlatina, infectious pneumonia, or even syphilis. There is no exception to this rule of the parasitic origin of valvular or myocardial mischief, except in chronic affections of the aortic orifice of old people, which coincide and result from the fatty, atheromatous, and sclerous changes of the arteries. Like all other cardiac diseases, those of the aortic orifice in the young are parasitic. It is degeneration without a trace of inflammation that is found in all

heart lesions, whether acute or chronic, and to this condition Professor Sée would give the name of "endocardie." The same parts, the same elements, and the same spots are invaded, the permanent lesion consisting of a hyperplasia of the conjunctive tissue. The disease is a continuation of the morbid process, which began in an acute or subacute form, perhaps unperceived by the patient or medical attendant. There is consequently but one cardiac disease presenting two types—the endocardial and the valvular types. A third type is due to sclerous, atheromatous, and other changes in the arteries, comprised under the general term "arteritis," due to age, alcoholism, gout, diabetes, &c. The fourth type, and to which M. Sée assigns the most important place, is that condition of the heart which is caused by sclerosis of the coronary arteries, leading to degeneration and narrowing of the vessels, and ultimately to sclerosis of the myocardium—the fifth type. In the sixth class, Professor Sée places the hypertrophies and dilatations consequent upon primary valvular disease. The seventh class comprises the nervous troubles. Professor Sée does not think, however, that palpitation and acceleration of the heart's action ever leads to hypertrophy. A pulse of 140 may exist without producing this effect. Nor does exophthalmic goitre lead to the slightest lesion or fatigue. The eighth type is the pericardiac, the cause here being always parasitic. In the ninth and last category, come dilatation and aneurysms of the aorta.

REMOVAL OF FOREIGN BODY FROM ABDOMEN.

At the meeting of the Academy of Medicine on Jan. 8th, M. Le Dentu related a case in which a wooden spoon, twenty-seven centimetres long, had been swallowed. Gastrostomy was performed forty-three hours afterwards, and it was then found that the foreign body had perforated the stomach at its greater curvature, and passing between the layers of omentum had fallen into the pelvis, whence M. Le Dentu proceeded to extract it by laparotomy. The patient was well in a fortnight, and was shown to the meeting. Amongst notable points in this curious case, M. Le Dentu alluded to the escape of the spoon into the peritoneum within twelve or fifteen hours of its being swallowed; the rapidity and solidity of the cicatrisation of the rent in the stomach after the passage of the foreign body into the omentum, so that no gastric contents were extravasated; the absence of peritonitis, and the reason why gastrostomy was necessarily first performed; and the entire absence of dyspeptic symptoms after suture of the stomach.

ARMY MEDICAL SCHOOL.

After a good deal of hesitation as to the selection of Bordeaux or Lyons as an appropriate position for the establishment of the Army Medical School, Lyons has been given the preference, as being the more central and possessing other advantages over Bordeaux. Inspector-General Vallin has been appointed Director, and Surgeon-Major Viry, Sub-Director of the School.

THE LATE DR. DUCHENNE.

A subscription is being raised for the erection of a monument at the Salpêtrière Asylum, to perpetuate the memory of Dr. Duchenne de Boulogne, one of the great promoters of modern neuro-pathology. Subscriptions should be forwarded to Dr. Gombault, treasurer, 41, Rue de Vaugirard, Paris.

TREATMENT OF TYPHOID FEVER.

At the meeting of the Paris Hospitals' Medical Society on the 11th inst., it was decided, on the motion of MM. Merklen and Féréol, to appoint a committee of investigation into the results of the treatment of typhoid fever in the hospitals during the years 1888 and 1889. The committee consists of MM. Féréol, Rendu, Gérin-Roze, Merklen, Moizard, Troisier, and Juhel-Rénoy.

Paris, Jan. 16th.

THE SERVICES.

ARMY MEDICAL STAFF.—Surgeon-Major John William Maxham, M.D., to be Brigade Surgeon, ranking as Lieutenant-Colonel, vice J. Davis, promoted (dated Dec. 19th, 1888); Surgeon-Major George Ryan is granted retired pay (dated Jan. 16th, 1889); Surgeon William Stewart Lecky, M.B., resigns his commission (dated Jan. 16th, 1889).

ARMY MEDICAL RESERVE OF OFFICERS.—Acting Surgeon Evan Jones, 3rd Volunteer Battalion, the Welsh Regiment, to be Surgeon, ranking as Captain (dated Jan. 16th, 1889).

ADMIRALTY.—The following have been placed upon the Retired List of their rank: Staff Surgeon William Henry Colahan, M.D. (dated Jan. 3rd, 1888); Surgeon Jas. Bailie Armstrong (dated Dec. 28th, 1888).—Staff Surgeon Robert Turner has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet (dated Jan. 9th, 1889).—Joseph R. M'Donnell, M.D., has been appointed Surgeon to Plymouth Hospital (dated Feb. 21st, 1889).

Obituary.

DR. H. A. PAGENSTECHER.

FOR some two hundred years the family of Pagenstecher in Germany, like that of Bell in England, has held an honoured name in the scientific professions. During last century it was to the philosophy of law and government that they seemed to be more especially drawn; in the nineteenth, medicine and the cognate sciences were the field in which they successfully laboured. The best known of them were the ophthalmic surgeon, Karl Pagenstecher, who died in 1865, Alexander Pagenstecher, who died in 1879, and Hermann Pagenstecher, also proficient in ophthalmic surgery, and more particularly associated with the Wiesbaden Institution for Diseases of the Eye. Heinrich Alexander Pagenstecher, the subject of this notice, was an accomplished physician like the others, and at first practised at Barmen, and thereafter filled the post of *Docent* in Gynæcology at Heidelberg. In 1860, however, he transferred his energies to zoology, in which he always took special interest, and soon distinguished himself by his papers on the anatomy of the Acari. In conjunction with Leuckart, Virchow, and Zenker, he worked at the Trichinæ, and greatly advanced the scientific knowledge of these parasites. His principal work is his "General Zoology," in four volumes, published between 1865 and 1881, embodying the researches of upwards of ten years, and universally considered as among the very best of its kind. "It is," says a brother zoologist, "the first rigidly scientific representation of the fundamental laws of animal life and structure on the basis of those findings which zoological research has, since Darwin's time, matured." Lay readers even will be interested in Pagenstecher's historical investigation of the gradual development of the fundamental principles of the newer zoology, with which he prefaces the great work above referred to.

Dr. Pagenstecher was a native of Elberfeld, and, in spite of indifferent health, which was his portion throughout his later life, he reached the age of sixty-three. Hamburg was his place of residence after his resigning, in 1882, the professorship he held at Heidelberg from 1865.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following candidates passed the Second Examination at a meeting of the Board of Examiners on the 10th inst.:—

Anatomy only.—W. Cathcart Hinde and J. H. Hadaway, students of Middlesex Hospital; H. Fitzstephen Nunes, B. F. Parish, and L. G. W. Tyndall, of St. Mary's Hospital; E. C. de Kretser, of the Ceylon Medical College; F. Pershouse, of St. Thomas's Hospital; J. C. Burton, of University College; M. F. Agar, D. L. Thomas, and W. T. Davies, of London Hospital; C. W. A. Macleod, of Westminster Hospital; B. B. Gilpin, W. R. Meyer, and J. W. Davies, of King's College Hospital; W. Stainton Mercer and R. D. Muir, of Charing-cross Hospital; A. E. Norris and W. K. Steele, of Guy's Hospital; G. C. Davies, A. W. Lemarchand, F. I. A. Dalton, and A. R. Badger, of St. Bartholomew's Hospital; G. P. Mead, of Cambridge and St. Bartholomew's Hospital.

Physiology only.—D. C. Meyers, of Toronto; R. Gillbard and G. M. Pratt, of Guy's Hospital; T. G. S. Crouch, A. Morrison, and A. D. Parr Dudley, of University College; F. W. Gattey and J. L. Blakeston, of King's College; J. Wood, F. H. Spilsbury, A. S. Gedge, P. C. Phillips, S. E. Baxter, and H. G. Williams, of St. Thomas's Hospital; S. W. Read, of London and Mr. Cooke's School of Anatomy and Physiology; Charles Welch, F. Dove, and M. C. Langford, of London Hospital; F. Lewis, A. G. R. Cameron, C. E. M. Hey, and

A. E. F. Huntsman, of St. Mary's Hospital; W. B. Welch, H. Kerswill, J. B. Lemon, E. R. Bastard, and W. D. Slyman, of St. Bartholomew's Hospital; J. E. M. Jenkins and Leslie Fletcher, of Charing-cross Hospital.

Passed on the 11th inst.:—

Anatomy and Physiology.—G. W. Barber, of Middlesex Hospital; Isaac George, of King's College; H. K. Rayson and Percy Lord, of Guy's Hospital; A. T. White, of Guy's and Mr. Cooke's School of Anatomy and Physiology; J. Bushfield, of Charing-cross Hospital; E. O. B. Voisin, of University College; H. Wreford, of St. Bartholomew's Hospital and Mr. Cooke's School of Anatomy and Physiology; M. H. Browne, of St. Bartholomew's Hospital; E. J. Steegmann, of St. Mary's Hospital.

Anatomy only.—A. W. Seal, of University College; E. T. P. Eames, of London Hospital; T. I. Mills, of Guy's and Mr. Cooke's School of Anatomy and Physiology; H. W. Ramsay, of St. Mary's Hospital; S. H. R. V. R. de Groot, of King's College.

Physiology only.—A. C. Leigh and G. H. Procter, of University College; C. F. Jack, of Charing-cross Hospital; Richard Freer, of St. Mary's Hospital; E. G. Renny, of St. Thomas's Hospital; E. M. Williams, W. W. Nuttall, M. P. A. Lesur, and G. E. Bensley, of St. Bartholomew's Hospital; H. D. Bishop, of London Hospital; William Ashby, of Guy's Hospital.

The following gentlemen having passed the necessary examination have been admitted Diplomates in Public Health:—

Brebner, G. Reith, M.D.Edin., Bensham Lodge, West Croydon.
Carter, R. James, M.R.C.S.Eng., The Grove, Camberwell.
Dantrl, Sorabshaw Hormasji, M.D.Aberd., Bloomsbury-square.
Kirwan, Albert, L.R.C.S.I., L.K.Q.C.P.I., Radipole-road, Fulham.
Lawton, H. Alfred, L.R.C.P.Lond., M.R.C.S.Eng., Poole, Dorset.
Ross, R., M.R.C.S.Eng., Lothian House, Ryde, Isle of Wight.
Schofield, Gerald, L.R.C.P.Lond., M.R.C.S.Eng., Durham House, Bournemouth.
Sykes, M. C., L.R.C.P.Lond., M.R.C.S.Eng., Barnsley, Yorks.
Wunderlich, Otto, L.R.C.P.Lond., M.R.C.S.Eng., Fitzroy-square.
Young, Edward Herbert, M.B.Dur., L.R.C.P.Lond., M.R.C.S.Eng., Okehampton, Devon.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At meetings of the Court of Examiners held on the 11th and 12th inst. the following were admitted Fellows:—

George Mark Patrick Murray. Charles Joseph O'Connor.

ROYAL COLLEGE OF PHYSICIANS IN IRELAND.—At the January examinations the following obtained licences in Medicine and Midwifery:—

Medicine.—Arthur Jeffares Barlow, George Andrew Gunton.
Midwifery.—George Andrew Gunton, James Hunter, William Porter Martin.

The undernamed was admitted a Member last month:—

Penrose John Barcroft, Staff Surgeon R.N.

PROFESSOR FLEISCHL VON MARXOW, of Vienna, fell down the other day on the stairs of the Physiological Institute and fractured his humerus.

LITERARY INTELLIGENCE.—Messrs. J. and A. Churchill announce the issue, on the 21st, of the sixth edition of "Mayne's Medical Vocabulary."

THE DETTWEILER TREATMENT.—Dr. Turban, of Carlsruhe, is building an establishment at Davos for the purpose of carrying out the Dettweiler system of treatment for lung diseases as practised at Falkenstein.

NEWSVENDORS' BENEVOLENT AND PROVIDENT INSTITUTION.—The festival dinner will be held at the Hotel Métropole on Tuesday, Feb. 26th, when Edward L. Lawson, Esq. (*Daily Telegraph*) will preside.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentlemen having been examined on two separate days have been admitted Fellows of the College: Mr. George Mark Patrick Murray, Mr. Charles Joseph O'Connor.

THE LATE DR. JAMES GUTHRIE.—It is announced that steps are being taken to erect, by public subscriptions, a memorial to the late Dr. J. Guthrie of Esher. The names only of donors, and not the subscriptions, will be published. Donations can be forwarded to His Honour Judge Greenhow and Messrs. Thornely and G. B. Batchelor, Esher.

ABERDEEN UNIVERSITY MEDICAL SOCIETY.—The first conversazione of the above Society was held this month, amongst others present being Professors Trail, Matthew Hay, McWilliam, Stephenson, Ramsay, and Minto. The chairman, Professor Cash, in his opening remarks, said that the fact of the University Medical Society having in this the second year of its existence enrolled nearly one-third of the Aberdeen medical students might be fairly taken as a sign that the Society's methods are good and are appreciated. An excellent musical programme followed.

THE SANITARY INSTITUTE.—At a meeting of Council of this Institute, held on Jan. 9th, G. J. Symons, F.R.S., in the chair, it was decided to hold two courses of twelve lectures for sanitary officers, the first course to commence in March and the second in October. Sixty-four members and Associates were added to the register, and twenty applications read for election at the next meeting.

THE INFECTIOUS DISEASES HOSPITAL, CARDIFF.—The Cardiff Ratepayers' Association has recently unanimously adopted a resolution to the effect that the present structure for infectious diseases is quite unsuitable for the purpose and dangerous to the patients sent there, and calls the attention of the corporation to the urgent need of providing an improved building without delay for infectious diseases as a sanatorium for the town.

HOLMESDALE COTTAGE HOSPITAL, SEVENOAKS.—At the annual meeting of subscribers and supporters of this hospital, Earl Stanhope, the president, in the chair, the report, which was of a very satisfactory character, was unanimously adopted. The accounts showed that the expenses had been £389 8*s.* 4*d.*, and the receipts £550 11*s.* 7*d.*, leaving a balance in hand of £161 3*s.* 3*d.* F. Le Gros Clark, Esq., F.R.S., consulting surgeon to St. Thomas's Hospital, was re-elected consulting surgeon to the cottage hospital.

EYE INFIRMARY, PLYMOUTH.—The annual meeting of this institution was held on the 9th inst.; Mr. J. H. Eccles occupied the chair. The committee reported that the number of patients was slightly in excess of last year, and admissions into the house were increasing year by year. During 1888 there were 1487 patients, 715 of whom had been cured, 440 discharged benefited, and 7 were incurable. The operations for cataract were 1555. The balance-sheet showed a balance in hand of £147 5*s.* 10*d.*

THE BRESSA PRIZE.—The Royal Academy of Science at Turin gives notice that the new term for competition for the seventh Bressa Prize, value 12,000 Italian lire, commenced on the 1st inst. The competition, which concludes at the end of December, 1890, is open to scientific men and inventors of all nations, and the prize will be given for the most important and useful discovery, or for the most valuable work on physical and experimental science &c.

A FOOTBALL FATALITY.—William Cropper, a Derbyshire professional cricketer, while playing a football match (Staveley against Grimsby, Association game) at Grimsby, on Saturday, was accidently kicked in the abdomen, and conveyed to the dressing room, Mr. Grimoldby, a surgeon, who was at the match, immediately tended him, but as he was in an unfit state to be removed, he died there the following morning. A post-mortem examination showed that death was the result of rupture of the bowels, which caused acute peritoneal inflammation.

PRESENTATIONS.—The members of the Old Meldrum Ambulance Class, which was organised by a committee of ladies, presented Dr. Durno, on the 8th inst., with a handsome microscope, bearing an appropriate inscription, as an acknowledgement of his services to them in preparing the class lectures. The Committee of Management of Court Hertford, No. 3050 A.O.F., last week presented Mr. T. Odell, of Hertford, on behalf of the members of the court, with a handsome marble clock, as a recognition of his services as surgeon since the establishment of the court.

MANCHESTER MEDICAL SOCIETY.—The following gentlemen have been elected office-bearers for 1889:—President: Dr. James Ross. Vice-presidents: Dr. P. H. Mules, Messrs. Frederick Melland, G. A. Wright, and A. Harry Young. Treasurer: Dr. C. E. Glascott. Secretary: Mr. F. Armitage Southam. Elected Members of Committee: Drs. Henry Ashby, Samuel Buckley, Joshua J. Cox, Leslie Hudson Jones, Simeon Holgate Owen, T. Carleton Railton, Graham Steell, and William Yeats; Messrs. H. A. Grundy Brooke, Thomas Jones, F. W. Jordan, and James Niven.

LEAD POISONING AT BRADFORD.—Further cases of lead poisoning are reported from drinking the water supplied by the Bradford Corporation, and according to the latest reports the cases in Wyke are increasing in number and seriousness—twenty-seven in Low Moor, two in Buttershaw, and two cases (one somewhat serious) in Cleckheaton. The cause of the mischief is the lead service pipes,

but as these have been laid down for many years the reason for the outbreak is perplexing the minds of the authorities and scientific men. A medical gentleman of Wyke accounts for the outbreak by a deficiency in the water of carbonic acid and sulphates of lime, and by the presence of organic matter, which might be owing to the recent heavy rains.

THE LEGISLATURE AND DANGEROUS LAMPS.—In relation to pending petroleum legislation, Colonel Majendie, C.B., has, we understand, requested Sir Frederick Abel, C.B., and Mr. Boverton Redwood to report to him as to the extent to which manufacturers of mineral oil lamps have voluntarily adopted the suggestions for the construction of such lamps issued in 1885 by the Metropolitan Board of Works, on the basis of recommendations made by Sir F. Abel and Mr. Redwood, after their experimental investigation of the causes of lamp accidents.

REGISTRATION OF PLUMBERS, DUBLIN.—The Public Health Committee of Dublin has recently received a deputation from the Plumbers' Association, to ask their assistance in becoming affiliated with the Worshipful Company of Plumbers, London, and to assist in effecting a reformation in the trade. A report from Sir Chas. A. Cameron, medical officer of health, Dublin, strongly in favour of the proposal was read, and the Committee expressed their readiness to promote the object of the Association as far as lay in their power. The Lord Mayor, Mr. Sexton, M.P., has since called a public meeting, to be held in Dublin, for the appointment of a local council to carry out the objects in view.

THE RHONE MEDICAL ASSOCIATION.—The report of the work done by the Syndicate of the Medical Association of the Rhone, which was read at the recent annual meeting at Lyons, states that in spite of a good deal of opposition from practitioners who were unwilling to join the Association, notwithstanding difficulties occasioned by the stringency of French law regarding medical societies, a good deal of useful work has been accomplished. In several cases the courts of law have referred matters concerning disputed medical charges to the syndicate, the advice of which has in almost every instance been accepted. Attempts in the direction of suppressing advertising quacks have not hitherto been successful, but the Association has obtained a promise that the public prosecutor shall take notice of any distinct case of illegal medical attendance which may be brought before him.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A Quarterly Court of the Directors of the Society was held at Berners-street on Wednesday, Jan. 9th, at 8 P.M., Sir James Paget, President, in the chair. It was resolved to distribute £1350 10s. among the sixty-one widows, thirteen orphans, and three orphans on the Copeland Fund. The deaths of three widows were reported. There were no fresh applications for grants. The expenses of the quarter amounted to £61 10s. 6d. The treasurer stated that the Centenary Present, £351, had been given to the widows and orphans on Oct. 29th of last year. Five new members were elected, and the deaths of five announced. A legacy of £100 had been received from the executors of Miss Louisa McKellar and a donation of £100 from Dr. Matthews Duncan, on occasion of the centenary. The directors determined to send a copy of the Short History of the Society, with extracts from the bye-laws and a form of proposal, to all medical men within the radius of the Society.

ROYAL METEOROLOGICAL SOCIETY.—The anniversary meeting of this Society was held on Wednesday last at the Institution of Civil Engineers, Westminster. Dr. W. Marcet, F.R.S., the President was in the chair, and delivered an address on "Fogs." Fogs and clouds are one and the same thing. A cloud is a fog when entered into, and a fog seen from a distance, suspended in the air, becomes a cloud. Dr. Marcet referred to London fogs. Dr. Tyndall has accounted for them by assuming each particle of condensed vapour to be covered by coal smoke. These fogs usually accompany a high barometer, and are frequently dry in their character. It is a well-known fact that cold air on the tops of hills, being heavier than the air below, slides down the slopes, so that the lower parts of hillsides are actually colder than the plains at some distance from the hills. Now London, in the Thames valley, is surrounded by hills. The air is colder on these hills than in London with its millions of inhabitants, its coal fires and factories; hence it is heavier, and will have a great tendency to slide down the hills towards the town and the river. Should the air in town be on the point of saturation, and the cold air from above saturated with vapour, it is obvious that the increased cold from above will produce a precipitation of moisture, and thus a fog is produced.

LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting, held on the 10th inst., the following list of officers, Council, and Microscopical Committee was adopted:—President: William Carter, M.D., F.R.C.P. Vice-Presidents: F. J. Bailey, L.R.C.P.; G. E. Walker, F.R.C.S.; *A. Bernard, M.B.; *Richard Williams, M.R.C.S. Hon. Treasurer: J. N. Cregeen, L.R.C.P. Hon. General Secretary: *E. W. Hope, M.D. Hon. Secretary to Ordinary Meetings: Damer Harrisson, M.R.C.S. Hon. Librarian: *C. G. Lee, M.R.C.S. Council: W. J. Fleetwood, M.K.Q.C.P.; Robert Jones, M.R.C.S.; J. Birkbeck Nevins, M.D.; C. Puzey, M.R.C.S.; *A. Barron, M.B.; *R. A. Brannigan, M.D.; *G. Westby, M.K.Q.C.P.I.; *R. Hughes Jones, L.R.C.P.; *T. H. Beckerton, M.R.C.S.; *Stanley Gill, M.D.; *W. Macfie Campbell, M.D.; *G. W. Steeves, M.D. Microscopical Committee: A. Barron, M.B.; *T. R. Bradshaw, M.D.; G. G. Hamilton, F.R.C.S.; *T. B. Grimsdale, M.B.; J. R. Logan, M.B.; Rushton Parker, F.R.C.S.; Frank T. Paul, F.R.C.S.; J. Wiglesworth, M.D.; *Peter Davidson, M.B.; *J. E. Gemmell, M.B.; *Arthur Wilson, M.R.C.S. Auditors: *Robert Jones, M.R.C.S., and *K. A. Grossmann, M.D. Those marked (*) did not hold the same office last year.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ANDERSON, JAMES, L.R.C.P. Edin., L.F.P.S. Glas., has been appointed Medical Officer of the Iver District, Drayton Union.

BAYS, JAMES T., M.B. Lond., M.R.C.S., L.S.A., has been appointed House Surgeon to the Hospital for Sick Children, Great Ormond-st., vice L. Gabriel, M.B., resigned.

BRACKENBURY, HENRY B., M.R.C.S., L.R.C.P., has been appointed Resident Medical Officer to the Royal Hospital for Children and Women, Waterloo Bridge-road, S.E.

BRENTON, WILLIAM HORE, M.R.C.S., L.S.A., has been appointed Medical Officer to the Northern District of the Plymouth Union, vice J. F. Eyeley, deceased.

CHARSLEY, R. S., B.A. Oxon., M.R.C.S., L.R.C.P. Lond. (late House Surgeon), has been appointed House Physician to Westminster Hospital.

CORSER, F. R. S., M.B., C.M. Edin., has been appointed Medical Officer of the Bourton-on-the-Water District, Stow-on-the-Wold Union.

FINNY, WM. E. ST. LAWRENCE, M.B., M.Ch., Roy. Univ. Irel., has been appointed Third Assistant Medical Officer to the Kent County Asylum, Barming Heath, Maidstone.

GODSON, CLEMENT, M.D. Aber., M.R.C.P. Lond., has been appointed Consulting Physician Accoucheur to the St. George's and St. James's Dispensary, King-street, Regent-street, in the place of the late Dr. Alfred Meadows.

GOTT, H., M.R.C.S., L.R.C.P. Lond., has been appointed Assistant House Surgeon to the Stafford Infirmary, vice G. F. Richards, L.S.A., resigned.

LINDEN, H. C., L.R.C.P. Edin., L.F.P.S. Glas., has been appointed Medical Officer of the Fifth District, Drayton Union.

MELLAND, BRIAN, M.B. Lond., M.Sc. Vic., M.R.C.S., L.S.A., has been appointed Junior Resident Medical Officer to the Manchester General Hospital for Sick Children, Pendlebury, vice Thompson, promoted.

NICHOLLS, FRED. L., L.R.C.S., L.M. Edin., L.S.A., has been appointed Medical Officer of the Fulborn District, Chesterton Union.

PARSLOE, H. H., M.R.C.S., L.R.C.P. Edin., has been appointed Medical Officer of the Hatherleigh District, Okehampton Union.

ROE, E. H., M.R.C.S., L.S.A., has been appointed Medical Officer for the Workhouse, Barton-upon-Irwell Union.

SMART, W. H., M.R.C.S., has been appointed Medical Officer of the Polesworth District, Atherston Union.

TANNER, C. PRICE, M.R.C.S., L.R.C.P. Lond., has been appointed Third Assistant Medical Officer to the Worcester County and City Lunatic Asylum, vice A. N. Little, M.B. Lond., appointed Senior Assistant Medical Officer at the Holloway Sanatorium.

TATTERSELL, C. H., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of the Barton District, Barton-upon-Irwell Union.

THOMPSON, J. H., M.D. Vic., has been appointed Senior Resident Medical Officer to the Manchester General Hospital for Sick Children, Pendlebury, vice H. H. Fisher, M.B. Lond., resigned.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

BIRMINGHAM WORKHOUSE INFIRMARY.—Clinical Assistant. Board, lodging, washing, and honorarium of 15 guineas. Term of office six months; renewable.

BURY UNION, County of Lancaster.—Medical Officer for the Heap Medical District. Salary £70 per annum, and fees for surgical operations and vaccination and midwifery fees.

CHELSEA HOSPITAL FOR WOMEN, Fulham-road, London.—Resident Medical Officer. Salary £80 per annum, with board and residence.

DEVON AND EXETER HOSPITAL.—Assistant House Surgeon. Salary £40 per annum, with board and lodging.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark-bridge-road, S.E.—House Surgeon. Salary £70 per annum, with board, washing, and residence.

FARRINGDON GENERAL DISPENSARY AND LYING-IN CHARITY, 17, Bartlett's-buildings, Holborn, E.C.—Honorary Physician.

GENERAL HOSPITAL, Birmingham.—Assistant House Surgeon. No salary, but residence, board, and washing provided.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—An additional Physician to Out-patients.

HOSPITAL FOR SICK CHILDREN, Great Ormond-street, London, W.C.—Medical Registrar and Pathologist, for one year; an honorarium of 50 guineas being voted at the expiration of that term.

JAFFRAY SUBURBAN BRANCH OF THE GENERAL HOSPITAL, Gravelly-hill, near Birmingham.—Resident Medical Officer. Salary £150 per annum, with board, residence, and washing.

LUNATIC ASYLUM, The Coppice, Nottingham.—Assistant Medical Officer. Salary £100 per annum, with furnished apartments, board, washing, and attendance.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan.—Junior House Surgeon. Salary £80 per annum, apartments, and rations (exclusive of wines, spirits, and washing).

SOMERSET AND BATH ASYLUM, Wells.—Junior Assistant Medical Officer. Salary £100 per annum, with board, lodging, and washing.

STATE CRIMINAL LUNATIC ASYLUM, Broadmoor.—Junior Assistant Medical Officer. Salary £175 per annum, rising £5 annually up to £200, with furnished apartments, coals, gas, and attendance.

ST. OLAVE'S UNION, Bermondsey.—Resident Assistant Medical Officer and Dispenser. Salary £100 per annum, with furnished apartments and rations.

UNITED KINGDOM BAND OF HOPE UNION, 4, Ludgate-hill, London.—Lecturers, duly qualified, and total abstainers, to deliver illustrated addresses in elementary schools throughout the country.

YORK RETREAT, York.—Junior Assistant Medical Officer. Salary for the first year £80, with board.

Births, Marriages, and Deaths.

BIRTHS.

KAYE-SMITH.—On the 14th inst., at 9, Dane-road, St. Leonards-on-Sea, the wife of E. Kaye-Smith, of a daughter.

MENDS.—On the 9th inst., at North-terrace, Anglesey, Hants, the wife of B. S. Mends, Surgeon, R.N., of a son.

MARRIAGES.

HEMMING—TAYLOR.—On the 10th inst., at Glyncorrwg Parish Church, Charles W. Hemming, L.R.C.S., L.R.C.P., of Abergwynfi, to Florence Isabella, eldest daughter of John Taylor, Sheriff Clerk, Cromarty, N.B.

PHILLIPS—MACAULAY.—On the 8th inst., at Kibworth, Leicestershire, Edgar Vaughan Phillips, M.R.C.S.L., L.R.C.P., of Tollerton, Yorkshire, to Mary Louisa, eldest daughter of Thos. Macaulay, Surgeon, of Kibworth.

TREVAN—LOCKWOOD.—On the 14th inst., at the Parish Church, Skelton-in-Cleveland, Frederick A. Trevan, Surgeon, R.N., of St. Endellion, Cornwall, to Emily Catharine, fourth daughter of the late George Lockwood, of Stockton-on-Tees.

DEATHS.

COLLIE.—On the 10th inst., at Villa Chiari (alla querce), Florence, Italy, George D. Milne Collie, M.D., late Assistant Surgeon, Royal Artillery.

DUFF.—On the 11th inst., at Elgin, N.B., George Duff, M.D., aged 69.

PATON.—On the 13th inst., suddenly, at Onslow-square, George Paton, M.D., Deputy Inspector-General of Hospitals, late Bengal Medical Service, aged 76.

PINNIGER.—On the 10th inst., at his residence, Blessington-road, Lee, Kent, Broome Pinniger, M.R.C.S., L.S.A. (formerly of Ryde, I.W.), aged 59.

RIDGE.—On the 9th inst., at his residence, High-street, Putney, Benjamin Ridge, M.D., late of Mount-street, Berkeley-square, in his 82nd year.

WAILES.—On the 10th inst., at Hemel Hempstead, Robert Wailes, M.D., aged 71.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, January 21.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.

SOCIETY OF ARTS.—8 P.M. Mr. Alan S. Cole: Egyptian Tapestry. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. W. R. Gowers: Syphilis and the Nervous System. (Lettsomian Lecture.)

Tuesday, January 22.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. George John Romanes: Before and after Darwin.

SOCIETY OF ARTS.—8 P.M. Sir James D. Linton: Some Recent Movements in relation to the Applied Arts.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. George Murray Humphry: Back-knee, Bow-knee, Knock-knee, and other Deformities resulting from Defect of Growth at the Epiphysial Lines.—Dr. Percy Kidd: On a peculiar Obstructive Form of Laryngeal Tuberculosis which simulates Bilateral Abductor Paralysis.

Wednesday, January 23.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M. Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical visits on Wednesday and Saturday at 9.15 A.M.

HUNTERIAN SOCIETY.—8 P.M. Dr. Turner: A case of Endocarditis.—Dr. Pitt: Bronchiectasis in Childhood.

SOCIETY OF ARTS.—8 P.M. Prof. George Forbes: Electric Meters for Central Stations.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be exhibited by Dr. Granville Bantock, Dr. Edis, Dr. Richard T. Smith, Mr. Lawson Tait, and others. President's Address. Dr. Bowreman Jessett: On two cases of Abdominal Operation with Unusual Complications.

Thursday, January 24.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. J. W. Judd: The Metamorphoses of Minerals.

THE SANITARY INSTITUTE (Parkes Museum, 74A, Margaret-st., W.).—5 P.M. Dr. G. V. Poore: London, Ancient and Modern, from a Sanitary Point of View.

NEUROLOGICAL SOCIETY OF LONDON (National Hospital for the Paralysed and Epileptic, Queen-square).—8.30 P.M. Annual Meeting for Election of Office-bearers, &c. Address by Mr. Jonathan Hutchinson on the Nervous System in its relation to Diseases of the Skin, and on other topics.

Friday, January 25.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

SOCIETY OF ARTS.—8 P.M. Mr. H. H. Johnston: The Asiatic Colonisation of East Africa.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Address of the President. Mr. Mayo Robson: Case of successful Nerve-grafting (the patient to be shown).—Mr. H. W. Allingham: Case of Removal from the Knee-joint of a Dislocated Internal Semilunar Cartilage.—Mr. A. Rowlby: Case of Compound Dislocation of the Elbow-joint, with Rupture of the Ulnar Artery; recovery.

ROYAL INSTITUTION.—9 P.M. Prof. G. H. Darwin: Meteorites and the History of Stellar Systems.

Saturday, January 26.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Ernst Pauer: The Character of the Great Composers and the Characteristics of their Works. (With Illustrations on the Pianoforte.)

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, January 17th, 1889.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Jan. 11	29·69	E.	39	37	54	43	37	·10	Overcast
,, 12	29·42	N.E.	37	35	..	38	23	..	Overcast
,, 13	30·05	N.E.	38	36	..	41	35	·23	Overcast
,, 14	30·19	N.E.	40	39	..	41	37	..	Overcast
,, 15	30·19	S.E.	38	36	..	39	36	..	Overcast
,, 16	29·95	S.E.	35	33	..	38	23	..	Overcast
,, 17	30·27	S.W.	38	36	..	41	34	..	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

MUSIC IN MEDICINE.

T. H.—As already pointed out in THE LANCET (Nov. 3rd, 1888, p. 877), the therapeutic value of music was well known to the ancient practitioner. Non-professional literature is full of testimony to the influence of melodious sounds in depressed or in exalted states of the nervous system. Witness the young David's charming away Saul's evil spirit with his harp; and, in Scott's "Legend of Montrose," the power possessed by Annot Lyle with her clairschach over the saturnine moods of Allan McAulay. In Horace's 32nd Ode, book first, he concludes his address to the lyre with (according to the received text)—

O laborum
Dulce lenimen, mihi cunque salve
Rite vocanti.

But Adolf Kiessling, in his recent admirable edition (Berlin, 1884), thinks the difficulties inherent in this reading can be solved only by adopting the brilliant emendation of Lachmann, according to which the stanza would close thus:—

O laborum
Dulce lenimen medicumque, salve
Rite vocanti.

(O! of our troubles the sweet, the healing sedative, &c.) See Kiessling's judicious note on the passage.

An English Practitioner will not, we believe, be obliged to pass an examination for permission to practise in Ontario.

THE CLIMATE OF SIDMOUTH.

To the Editors of THE LANCET.

SIRS,—Much interest has been felt in the perusal in the public press of letters from various correspondents in reference to the mildness of the current season, the late blooming of plants, and the special advantages of certain health resorts. Though last, I hope a few words from a locality that, when visited by Her Majesty and her Royal parents the Duke and Duchess of Kent in the year 1819, enjoyed the proud distinction of being termed the "queen of watering-places" may not prove of the *least* importance.

Among plants at present blooming in the open in this locality may be named the Devoniensis, Marie Van Houtte, La Malmaison and Gloire de Dijon roses, ice plant, fuschias, myrtle, rhododendron, and magnolia (specimens of the two latter, selected from fifty or sixty similar blooms, accompany this letter), whilst wall-flowers, primroses, and violets are numerous, with here and there mignionette, lobelia, and the Marguerite daisy. On New Years' Day a dish of green peas was picked, and on that day I gathered from a hedge-bank a wild strawberry plant bearing three ripe fruit, and on the same day were brought me three fine sprigs of hawthorn (May), one of which I enclose, bearing fourteen clusters of fairly perfect and highly scented blooms. The local mean daily maximum temperature during December was 49·7°. As evidencing the purity of the air and water of the district, it may be mentioned that during the five years ending December last six deaths only from zymotic disease were registered, and no death from diarrhœa has been registered during the past twelve years; and as touching on malaria, I have neither seen nor heard of a case of ague during a professional career of upwards of thirty-five years, and this in a population of 4000. The death-rate during the past ten years has averaged from 11 to 18 per 1000 per annum. The importance of such statistics as these will be best appreciated by medical men.

With the knowledge of the foregoing, and taking into consideration the frequent uncertainty of the purity of water, the frequent presence of malaria, the unsatisfactory cuisine, and the absence of English household comforts that invalids visiting continental health resorts are often exposed to, it is no extravagant assertion to make that in leaving our own isle they very often go further and fare worse.

I am, Sirs, yours faithfully,

THOS. H. S. PULLIN, M.D.,
Sidmouth, Jan. 7th, 1889. Med. Officer of Health.

"*" The specimens referred to in the above letter have been received in a state of excellent preservation.—ED. L.

VENTILATION OF PUBLIC BUILDINGS.

IN reference to an annotation on this subject which appears in our issue of the 5th inst., Messrs. Boyle & Son, of Queen Anne's-buildings, Holborn Viaduct, write to the effect that the statement is erroneous that there is no system at present in use that will properly ventilate a public building and that the principal thing that can be done to avoid the evils arising from defective ventilation is to reduce the exhaustion of the air to a minimum by preventing overcrowding. Messrs. Boyle guarantee that the ventilation by their automatic system will at all times be entirely efficient and satisfactory, and without the slightest draught.

Medical Officer of Health.—The answer to the first question practically covers all the others. Our correspondent is under no legal requirement to hold a diploma in public health; this requirement does not come into force until January 1st, 1892, and then only relates to medical officers of health who are appointed after that date to districts or combinations of districts having a population at the last census of not less than 50,000. Further, a medical officer of health is exempt from this qualification if the population of the district in which he has hitherto served is not less than 20,000. The appointments of medical officer of health are vested in the district councils—i. e., the urban and rural sanitary authorities; but the county council may appoint one or more such officers, and, by arrangement with the district authority, make their services available in the district. The district authority, under such circumstances is relieved from the obligation of appointing a medical officer of health, which is now imposed upon them by the Public Health Act.

Enquirer.—The subject of stertor was discussed in an article by Dr. R. L. Bowes, published in THE LANCET of Dec. 18th and 25th, 1880.

"A USEFUL HINT."

To the Editors of THE LANCET.

SIRS,—The two interesting letters under the above heading which appeared in THE LANCET remind me of an operation I once saw skilfully performed by a blacksmith in a market town in Ireland.

A country boy, about twelve years of age, returning home from a market town with some of his relatives, was entrusted with the carriage of a new iron pot. Perhaps for the facility of carriage, the boy took off his cap and placed the pot obliquely on the back part of his head However, on his way homewards, from some cause or another, the pot slipped forward and downward over his face. Unavailing efforts were made at the time of the accident and after he reached home to get the pot off his head. The next morning the boy was taken back into the town by his father in order that a doctor of repute might have an opportunity of trying his skill on the case. On the lad's progress through the street which led to the doctor's house he had to pass a blacksmith's shop. The blacksmith, hearing the commotion, ran out of his shop to see what it was all about. He was a clever, witty man, and at a glance he comprehended the ludicrous state of things, and after a hearty laugh he requested the boy's father to allow him to try if he could not extricate the boy from the pot. The request was readily granted, and the boy was led into the forge. The smith expeditiously prepared for the operation. He greased one of his fingers, and then with considerable difficulty he insinuated it between the side of the boy's head and the pot. This done, he pressed the side of the pot opposite to his finger against his anvil, and then with his hammer he struck the part of the pot over his finger with a quick heavy tap, which caused the pot to fall to pieces, happily, it may be said, before there was "death in the pot;" for the little fellow was much exhausted from hunger and thirst, the want of sleep, and the rough treatment he had undergone before he came into the blacksmith's hands. I am, Sirs, yours truly,

Lincoln, Jan. 15th, 1889. WILLIAM O'NEILL, M.D.

A "REMARKABLE CASE OF PROBABLY CANCEROUS DISEASE."

Mr. Charles Williams of Port Isaac writes, with reference to the article of Mr. Travis in our issue of Jan. 5th, that the case recorded by Mr. Travis as one of "sloughing phagedæna" much resembled that published by himself. Mr. Williams still thinks, however, that his case presented all the characters of cancer, except in the fact of the ulceration healing on more than one occasion, and for this peculiar character he would suggest that the case belongs to a new variety of malignant disease, which he would style "undulating cancer." He adds that his patient died on Nov. 27th. Before admitting a new variety of cancer typified by this case, it would surely be necessary to have filled up a regrettable hiatus. Mr. Williams in his paper did not allude to the histological characters of the new growth. "Rodent ulcer," we may remind him, is prone to heal temporarily, and his case would seem to have features in common with that form of malignant disease.

S. Rutherford.—We think it would be reasonable to give the certificate requested. To our minds premeditation of the act and its apparently wilful execution do not disprove the correctness of the theory of insanity. Besides the act itself we gather that the person in question had been greatly excited before the commission of the deed. Had the tragedy happened suddenly in the heat of passion, and had it been homicidal, we agree with our correspondent that conviction and its legal consequences would probably have followed; but in the case referred to the planning of the act and the time taken to carry it out point to uncontrollable impulse to commit crime for which the offender would be held or should be held irresponsible.

J W. D.—Heath's Dictionary of Practical Surgery (Smith, Elder, & Co.).

THE AIR ON THE NILE.

To the Editors of THE LANCET.

SIRS,—As the humidity of the air on the Nile is not regularly registered, I send you the results of observations taken between Minieh and Thebes in the saloon of this boat, with a psychrometer such as is used in the French meteorological observatories, at such hours as did not interfere with my researches:—

1888.	No. of observations.	Psychrometer. mean.	max.	min.	Thermometer. mean.	max.	min.
Nov. 21–5	25	66	80	51	66	72	55
„ 26–30	15	61	75	47	65	70	58
Dec. 1–5	17	66	78	43	65	79	55
„ 6–10	20	59	69	47	63	71	52
„ 11–15	20	59	71	45	60	69	50
„ 16–20	21	60	70	50	66	72	47
„ 21–25	15	59	71	47	63	69	54
„ 26–30	20	59	74	49	69	73	56
For 40 days	153	61	80	43	64	79	47
„ December.	93	59	78	43	63	79	47

The Day.	No. of observations.	Psychrometer. mean.	max.	min.	Thermometer. mean.	max.	min.
Till 7	11	68	75	57	56	65	50
„ 8	22	69	77	57	56	64	48
„ 10	11	67	78	58	57	64	52
„ 12	13	66	76	57	62	71	58
„ 2	11	58	66	47	66	71	64
„ 3	6	52	59	47	71	77	66
„ 4	12	52	61	43	69	78	59
„ 5	5	52	62	45	69	72	64
„ 6	14	55	66	47	68	72	59
„ 7	6	61	68	57	69	71	67
„ 8	6	62	65	57	67	69	64
„ 10	25	60	75	50	66	71	60
„ 12	11	60	66	53	65	68	60

The influence of the lamp in the evening and of the opening of the windows in the morning is perceptible. Taking the hours only of the French observations, the December mean of humidity is 62 per cent. of saturation, and compares with them as follows:—

	Mean.	7 A.M.	1 P.M.	7 P.M.
Biskra	55	60	47	58
Nile	62	66	58	61
Nice	74	—	—	—
Algiers	78	78	74	81
Paris	79	—	—	—

In dryness, therefore, of the superiority which Biskra has over Nice the Nile has about two-thirds, while in average change from morning to the heat of the day it has less than two-thirds that of Biskra.

I am, Sirs, yours faithfully,

AWA SAUNCKS.

Dahabeeyeh *Seven Hathors*, off Karnak, Dec. 30th, 1888.

Carina.—"Caul" is the appellation of the amnion as it comes away with the child at birth. It is held by some superstitious persons to possess the properties of a charm or talisman, and to be especially potent in protecting from ill "those who go down to the sea in ships." As far as we know, it has not a fixed or quotable market value. A caul has fetched as much as £5; but we should say the measure of its worth is the cupidity of the vendor and the foolishness of the purchaser.

PHILANTHROPIC WORK IN PRISONS.

A WEEK or two ago we drew attention in a short article to the work carried on in an American reformatory, the Elmira. It will be satisfactory to many to learn that prisons in England are not destitute of organised means whereby the term of incarceration for social crime may be made subservient to the moral improvement of the convicts. An article in the January number of the *Sunday Magazine*, entitled "Mr. Merrick and Millbank Gaol," gives some interesting particulars of the efforts which have been made, and are still in operation, to bring to bear upon the inmates of the prison influences calculated to act beneficially on them when the period of penal servitude shall have expired. The labours of Mr. Merrick, the indefatigable chaplain of the gaol, are divided into four distinct branches—(1) that on behalf of those desiring to emigrate, (2) that on behalf of mothers, whether wives of prisoners or prisoners themselves, (3) the providing of material comforts, such as food and clothing, (4) general assistance. For examples of the gratifying results of persevering efforts towards raising the moral tone of even hardened criminals, we must refer to the article we have mentioned.

J. D.—Papers upon this subject will be found in the first volume of the *Medical Times and Gazette* for 1857, pp. 177 and 199. Numerous references to this question occur in "Neale's Medical Digest."

DISPENSARIES AND OUT-DOOR HOSPITAL RELIEF.

To the Editors of THE LANCET.

SIRS,—The present is, I think, a favourable time for contrasting these two forms of medical aid, now so prevalent amongst the large mass of both poor and well-to-do people in London.

Having passed twelve months in a busy dispensary, I may perhaps look upon myself as fairly conversant with the subject. I may say that I returned to London after nearly thirteen years' practice in the country, and in a district unblessed with hospitals and paupers. I have therefore ample experience in surgery. What soon struck me in my dispensary work was the respectability of the patients and the gratitude with which they paid their small fees (they would willingly have paid more). But, again, I found all these people, belonging to the well-paid artisan class, from whom you would receive very fair fees in the country, felt no shame in going or sending their children regularly to the hospital. If an operation was suggested, the hospital was really looked upon as a necessity, and I found that the majority of medical men never operated at all, but sent all their cases to these institutions, where without inquiry and without fee they are thankfully admitted. I found, however, that one could operate if he wished, charging, of course, small fees, and I took care that very little escaped my hands for the benefit of these so-called charities. This state of things is most serious. The majority of London medical men are living in straitened circumstances on account of this pauperised population. But what need of surgeons? Chemists with a little knowledge of medicine are quite equal to this style of work, and the fees might be remunerative in their case. The idea of raising the standard of surgical examinations strikes one as simply satirical. But look at the future. Pauperised patients will bring up pauperised offspring—people without any independent feeling and without any hesitation seeking this wholesale gratuitous relief,—and the relationship between medical men and these classes thoroughly destroyed. The satire is complete when we find the majority of medical men in London are qualified surgeons—men who have not an instrument and never an opportunity of practising their craft.

There is but one remedy, and that rests with the London practitioners themselves. Let committees be formed upon a common ground, that we may not only gain a livelihood, but that we shall insist upon doing the work for which we are qualified, that a stigma shall be cast upon people who consent to receive pauperised aid, that they shall be bound to recognise their responsibilities as parents and be compelled to pay for the injuries and accidents inseparable from their parental duties, and borne willingly by their worse paid but more independent countrymen in a similar position. Dispensaries carried on by honest practitioners can well bear investigation and be proud of the part they are playing. People coming there may at least have a spark of independent feeling, that they have their own doctor and that they pay a small douceur for the attention given to them. Hospital surgeons should reflect more upon this social problem, for their fees and daily bread largely depend upon their poorer brethren whom they are so unjustly injuring.

I am, Sirs, yours faithfully,

January, 1889. A LONDON SURGEON.

"DEATH FROM THE PRESENCE OF A CASEOUS GLAND IN THE TRACHEA."

IN our issue of the 5th inst. we reported a death from the presence of a caseous gland in the trachea. In the report it was stated that "the gland which caused the fatal result was found lying loose in the trachea, having been 'shelled out' from the suppurating cavity." This, it appears, is inexact, as the gland in question, instead of lying loose in the trachea, was attached by firm adhesions to the margin of the opening in that tube, the smaller part of its substance being outside, but continuous with, that which had made its way through. The specimen will, we understand, be shown in due course at the Pathological Society.

UNQUALIFIED PRACTICE AND CORONERS' INQUESTS.

AT an inquest by Mr. Baxter, at Bromley, on two children said to have died of diphtheria, it was elicited that the eldest child was first seen by an unqualified assistant named Hickey. He obtained the attendance of a doctor, Mr. Wadley, but the child died and the doctor gave a certificate of death from croup and exhaustion. Evidence was taken to show from a post-mortem examination that there was no sign of throat disease, and that death was caused by chronic pneumonia, accompanied in one case by congestion of the lungs, and in the other by convulsions. The jury returned a verdict in accordance with the evidence, and requested the coroner to call the attention of the Medical Council and the Apothecaries' Society to the case. These cases are imperfectly reported, and we withhold the expression of any opinion upon them. Meantime they should serve as a warning to all practitioners against the wrong use of unqualified assistants. Hickey stated that he was assistant to Mr. Wadley, and showed the coroner an undated agreement by which he let the premises, 91, Guildford-road, to Mr. Wadley, and in return Mr. Wadley made him his assistant at a salary of 30*s.* per week

Camberwellian.—Unfortunately there is no means of punishing such advertising quacks as our correspondent refers to in his letter, unless perchance it can be proved that their treatment has resulted in the death of a dupe. Then of course they would be brought within the purview of the criminal law. We entirely endorse "Camberwellian's" statements. If the Legislature of this country would only copy the French law relating to patent medicines—viz., that to be legally saleable their composition must be formally declared to the authorities—some good might be done.

Wm. Fraser, M.B.—1. The microscopic details are quite superficial, the structure of the liver in the frog and pigeon, for example, being dismissed in ten lines, and that of muscle in as many more.—2. The best manuals are those of Swanzy, Carter, Frost, and Nettleship, all equally good.—3. The last edition of Dr. Atthill's book was, we believe, published in 1880.

A PROBABLE CAUSE OF NON-SUCCESSFUL VACCINATIONS.

To the Editors of THE LANCET.

SIRS,—Allow me to call attention to some facts which have come under notice and which seem to me to explain sufficiently the non-success of certain vaccinations, seemingly effected under the most favourable conditions for success.

Not long ago it was my duty as surgeon of one of the Atlantic liners to vaccinate all the passengers who came under the regulations of the Board of Trade in this respect. On one voyage there were on board about a dozen of those peculiar people who would not for some time allow me to vaccinate them, and, in fact, only yielded on my threatening to point them out to the health officer when he came on board. Then, having undergone vaccination, they one and all immediately commenced to suck the marks and to spit out the matter removed, and continued doing so for a long time. I made some inquiries amongst the steerage stewards, and some of them told me that they had seen this done before. I remarked that these people all insisted on being vaccinated on the wrist. This practice of sucking the vaccine mark as described may account for a certain number of the unsuccessful cases one meets with, and which throw so much doubt on the quality of the vaccine used, otherwise of the best and most reliable quality. I need not point out how grave a matter this is, nor how far reaching its consequences may be, both in this country and still more so abroad. How far this practice prevails it would be almost impossible to ascertain, but that it does exist I can vouch for. Some of these people told me when I spoke to them about it, that it was the way they had of fooling the doctor and of saving themselves a lot of trouble both with the authorities and with the vaccination matter.—Your obedient servant,

Dublin, Jan. 10th, 1889. H. T. O'REILLY, F.R.C.S.I.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Braxton Hicks, London; Dr. Macnaughton Jones, London; Dr. Suckling, Birmingham; Mr. F. Treves; Mr. S. Paget, London; Dr. O. Sturges; Dr. O'Neill, Lincoln; Mr. Sweeting, London; Mr. C. Williams, Port Isaac; Mr. Street, Cambridge; Mr. McKinney, London; Mr. James Anderson, London; Dr. Boobbyer, Nottingham; Messrs. Maythorn and Co., Biggleswade; Mr. Blackett, London; Messrs. Burroughs and Wellcome, London; Mr. Croft, London; Mr. F. N. Pedley; Mr. Noble Smith, London; Mr. Pick, London; Dr. Gason, Rome; Messrs. Bush and Co., London; Herr Karl Meyer, Hamburg; Messrs. Royle and Son, London; Mr. Wilbour, Paris; Dr. Charteris, Glasgow; Dr. Tucker Wise, Maloja; Mr. Southam, Manchester; Mr. Nundy; Dr. Clement Dukes, Rugby; Dr. M. Natier, Paris; Mr. W. M. Gee; Messrs. Street Bros., London; Mr. D. Tallerman; Mr. Keetley; Dr. Adam, West Malling; Dr. Cantani, Naples; Dr. Pullin, Sidmouth; Messrs. Green and Co., London; Mr. W. Griffith, London; Dr. W. Stephenson, Aberdeen; Mr. H. T. O'Reilly, Dublin; Mr. A. E. Barker, London; Mr. A. Duke, Dublin; Dr. J. R. Wolfe, Glasgow; Mr. H. E. Jones, Liverpool; Mr. G. A. Ferguson, London; Dr. Wm. Fraser, Ashburton; Mr. T. W. Jenkins, Whifflet; Dr. Macadam, Edinburgh; Mr. Jones, Bury; Dr. Tate, Notts; Mr. Arbenz, Birmingham; Mr. W. Taberner, Wigan; Dr. Smith, Belfast; Mr. Fuge, Taunton; Mr. Ford, Devonport; Mr. White, Bradford; Mr. Hovell, London; Mr. Barlow, Birmingham; Mr. Benton, London; Mr. Parsons, Hastings; Dr. Baker, York; Mr. Lilwall, London; Dr. Bullmore, Falmouth; Mr. May, U.S.A.; Dr. Ker, London; B. V. M., London; Matron, Cardiff; Anti-Quackery; Chrisma, Holborn; Enquirer; Reader; Devon and Exeter Hospital; Medicus, London; M.D., M.R.C.S.; Denaeyer's Peptones Co., London; Cymro, Chester; Life, London.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Willan, Devizes; Miss Fitch, Cadmer; Mr. Sandlin, Hull; Mr. Denman, High Wycombe; Mrs. Barker, Worthing; Mr. Foote; Mr. Williams, South Wales; Mr. Notting, Portsmouth; Mr. Blyth, Salisbury; Mr. Wilkin, Burwash; Mr. Hemming, Abergwynfi; Mr. Stenhouse, Glasgow; Mr. Jennings, Coleford; Mr. Goodman, London; Mr. Heywood, Manchester; Dr. Finedon, Northamptonshire; Mr. Heap, Bury; Mr. Mort, Lewisham; Dr. Topping, Forest-gate; Miss Maclure; Mr. Ferguson, Inverary; Mrs. Palmer, Hereford; Upsilon, Liverpool; L. T., London; Medicus, Manchester; Lura, Southport; Partnership, London; Lady Superintendent, Canterbury; Monument; Scot, London; Medicus, Chelsea; Y. Y., London; S. L., London; M.B., Aberdeen; H. C. N., London; S. J., London; Cerebus, London; P. H., London; M.D., Manchester; A. S., London; Antipyrin, London; T. P., Taunton; Trocar, Leeds; D. B., London; Medicus, Liverpool; Medicus, Cornwall; Practitioner, London; M. S., London; G., Camberwell; F. C., London; Medicus, Southampton; Graduate, N.B.; Medicus, Margate; Beta, London; A. B., Birmingham; G. A., London; Medicus, Stamford-hill.

Bath Argus, Eastern Morning News (Hull), Birmingham Daily Post, Pembrokeshire Times, The Cornishman (Penzance), Methodist Recorder, Dumfries and Galloway Courier, Surrey Advertiser, Beverley Recorder, Hertfordshire Mercury, Newmarket Journal, Bridgwater Independent, North Wales Guardian, Ross-shire Journal, Folkestone Express, The Capitalist, Kirkcudbrightshire Advertiser, Widnes Weekly News, Kent County Standard, The Protestant Standard, Bacup and Rossendale News, Reading Mercury, Wigan Examiner, Herald and Weekly Free Press, Tyrone Constitution (Omagh), Maritime Medical News (Nova Scotia), Canterbury Press and Kent County News, The British Weekly, Sheffield and Rotherham Independent, Mining Journal, Bell's Weekly Messenger, Le Bailliage (Guernsey), Hawick Express, Brighouse and Rastrick Gazette, Pump Court, Ross Gazette, North Wilts Herald, Louth and North Lincolnshire Advertiser, Market Harborough Advertiser, Coventry Times, &c., have been received.

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